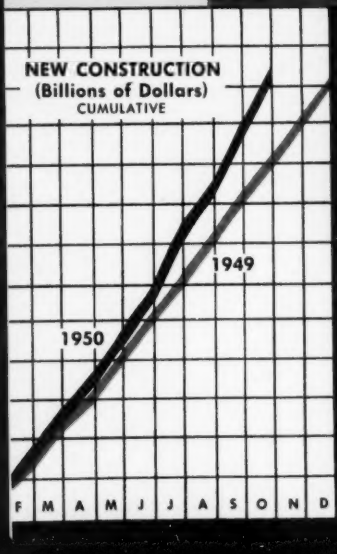
The CONSTRUCTOR

OFFICIAL PUBLICATION OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA

Volume XXXII **NOVEMBER 1950** Number 11

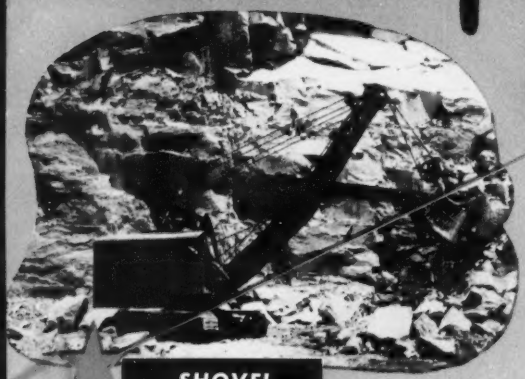
- BUILDINGS
- HIGHWAYS
- AIRPORTS
- RAILROADS

PUBLIC WORKS

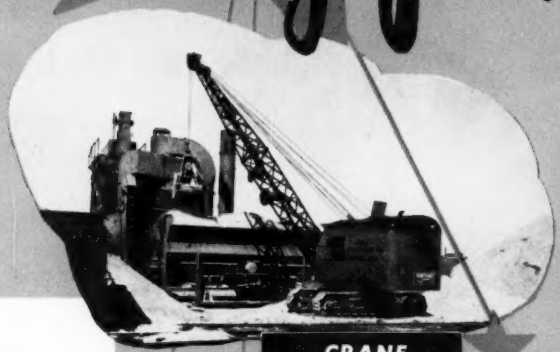


Government's Control Policy on Construction.
—Pages 23–25

The star performer on every job!



SHOVEL



CRANE

DRAGLINE

WEIGH *all* the features in the Shovel, Crane, Dragline, Pullshovel or Truck Crane you intend to buy! Remember that it takes more than one feature to make a piece of equipment profitable to you. It isn't a type of crawler, a type of control or a type of drive that you want. It is high output! That's what makes money — and you want the combination of advantages that makes high output possible.

Weigh all the features in the equipment you are considering. Other equipment you will find is often spoken of as "A Good Crane", "A Good Dragline", "A Good Shovel or Pullshovel" but Northwest is universally recognized as a leader whether operating as a Shovel, Crane, Dragline or Pullshovel. You can't have Northwest advantages unless you have a Northwest!

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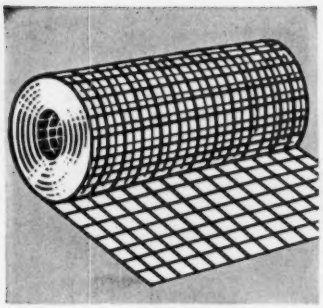
TRUCK CRANE

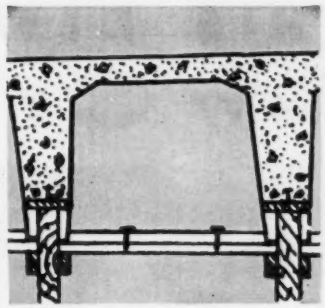
PULLSHOVEL

NORTHWEST

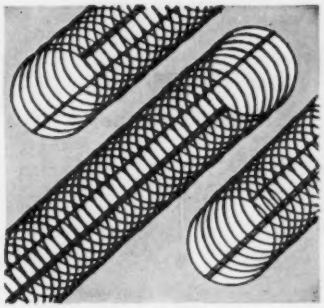
CRAWLER and TRUCK MOUNTED SHOVELS • CRANES • DRAGLINES • PULLSHOVELS



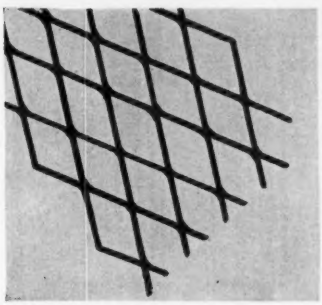
WIRE FABRIC



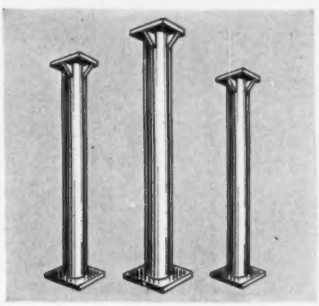
STEEL FORMS for concrete joists



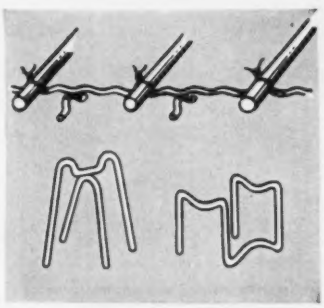
REINFORCING SPIRALS



EXPANDED METAL



LALLY COLUMNS



REINFORCING ACCESSORIES

Construction Steels for Prompt Shipment from Stock

Did you know that your nearby Ryerson plant is a time-saving source for the products pictured above? And that, right now, Ryerson stocks of all these products are "fairly good to excellent"? Most are on hand in several types and a wide range of sizes.

Ryerson construction steel experts are ready for your call at each of thirteen strategically located plants. You can count on them to give your requirements special attention and prompt, accurate handling.

Your nearby Ryerson plant is also a convenient source for many other construction steels, but, of course, today some shortages are inevitable. However, call us for any steel requirement and we'll do our level best to help you.

RE-BARS IN STOCK!

Current demand has drastically reduced reinforcing bar stocks at most Ryerson plants. However, our LOS ANGELES and SAN FRANCISCO plants have good stocks of new billet, intermediate grade bars meeting ASTM specification A15-39 and the new bond specification, A305-49—and prompt shipment can be made in stock lengths or fabricated to your order.

RYERSON STEEL

JOSEPH T. RYERSON & SON, INC.—STEEL SERVICE PLANTS AT: NEW YORK • BOSTON • PHILADELPHIA • CINCINNATI • CLEVELAND
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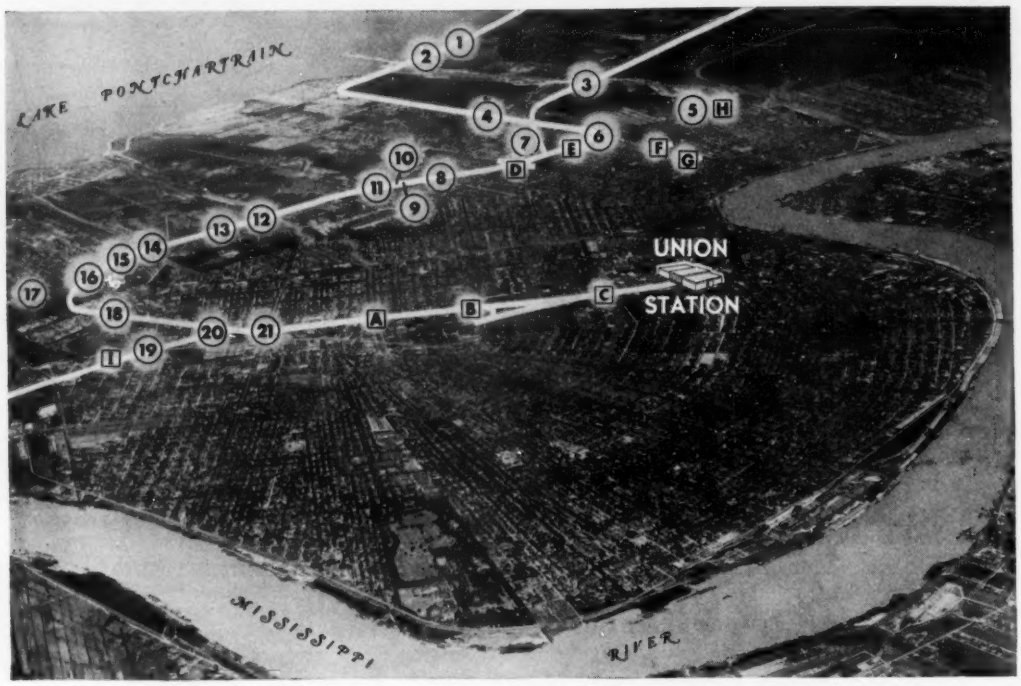
THIS NEW
Old New Orleans



Air view of New Orleans, showing location of Union Terminal and 30 grade separations—see key below, right.

$50-Million Terminal and Grade Separation Program Makes Construction History

● Progress is on the march in delightful old New Orleans, where a construction program tremendous in scale and concept is making civic and industrial history:

(1) A great new Union Terminal will shortly replace five scattered, outmoded structures, now serving seven trunk lines.

(2) Thirty modern grade separation structures will eliminate 116 out of 144 traffic-laden grade crossings—22 separation structures scheduled for completion simultaneously with the Terminal, in 1952, then three more within 18 months, and five thereafter.

Soundness of execution matches the imagination and ingenuity of the program. Every project in this vast undertaking embodies the utmost in engineering know-how and in staunch construction of enduring integrity, as exemplified by the use of many thousands of barrels of Lone Star Cement in concrete structures... assuring the durability, fire-safety and low maintenance which add up to lowest annual cost and highest taxpayer appreciation.

KEY TO GRADE SEPARATIONS

UNDERPASSES: (1) Hayne, (2) Downman Road, (3) Burma Road, (4) Gentilly, (5) Poland Ave., (6) Florida Ave., (7) Franklin Ave., (8) N. Broad, (9) Gentilly, (10) Paris Ave., (11) St. Bernard Ave., (12) Wisner, (13) Hospital, (14) Marconi Drive, (15) Florida Ave., (16) Canal Blvd., (17) Pontchartrain Blvd., (18) City Park Ave., (19) Leonidas, (20) Pontchartrain Blvd., (21) S. Carrollton.

OVERPASSES: (A) Jefferson Davis Pkwy., (B) S. Broad, (C) S. Claiborne Ave., (D) Elysian Fields, (E) Franklin Ave., (F) Galvez, (G) N. Claiborne, (H) Poland Ave., (I) Palmetto.

General Supervision:
NEW ORLEANS RAILROAD TERMINAL BOARD and
NEW ORLEANS UNION PASSENGER TERMINAL COMMITTEE
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CHARLES E. CASSAGNE, Jr., Administrative Engineer
For Terminal Committee: **C. J. WALLACE,** Chief Engineer
Associate Architects:
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The CONSTRUCTOR

BUILDINGS • HIGHWAYS • AIRPORTS RAILROADS • PUBLIC WORKS

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COVER

Photograph depicts float of the 820th Engineer Aviation Battalion sponsored by the Northern California Chapter, A.G.C., which appeared in the St. Patrick's Day parade in San Francisco, last March. This outfit is one of the 64 A.G.C. units out of a possible 80 placed on the Army's Organized Reserve Corps troop list. Praise for these contingents will be found in a letter from the Secretary of the Army addressed to H. E. Foreman, A.G.C.'s managing director, Page 55.

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Macomber engineers have worked
toward an objective
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of the common load bearing members
of a building.

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of these structural components
into CATALOGED items
was of equal importance.

We do not speak of this source
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solution of your daily needs
as some monument we have erected.

No—its only value is the extent
to which you can use this
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to realize a profit
in today's close bids.

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PRACTICAL DESIGN INFORMATION
FOR HOW HIGH, WIDE AND HANDSOME
YOU WANT TO BUILD ANYTHING —
FROM A SCHOOL TO A SKYSCRAPER

National Production Authority's Order M-4, effective midnight of October 26, prohibits 44 types of amusement, recreational, and entertainment construction to conserve materials for national defense, and also announces NPA, if found necessary, "may further limit the commencement of construction of additional types of projects which do not support the defense effort or increase the nation's productive capacity."

Original language of the policy statement on types of construction other than amusement warned projects may be halted "even though the commencement of such projects at this time is not forbidden by this order," but was changed on October 31 after industry protests spearheaded by the A.G.C. pointed out possible consequences of a policy more drastic than that employed in World War II.

NPA Administrator W. H. Harrison expressed regret that the policy statement (Section 22.2) of the original order caused concern in the construction industry and emphasized "that it will continue to be the policy of NPA not to interfere with production and construction unless such action is clearly indicated by immediate defense needs." (Details, Pages 23-24)

Other controls on construction placed in operation through credit restrictions on residential projects, both conventional and federal-guaranteed. Housing and Home Finance Agency, Veterans Administration, and Agriculture Department issued rules to dovetail into Federal Reserve Board's Regulation X. At FRB press conference, announced that commercial construction credit restriction is under study. (Page 25)

NSRB Chairman Symington named certifying authority for manufacturers seeking tax benefits to expand plants for defense production. Extension of loans for emergency facilities and acceleration of amortization under FRB's Regulation V may be in offing.

Authority to assign "DO" priority ratings for authorized procurement and construction programs was delegated under NPA Regulation 2 to Atomic Energy Commission and Secretary of Defense. Contracting officers in most cases will automatically issue ratings for defense contracts in effect and notify contractors. However, Munitions Board suggests prime contractors contact contracting officers to make sure their defense contracts subject to ratings are covered. (Page 24)

Order M-1 permits steel producers to reject DO rated orders received less than 45 days before first day of month in which shipment requested, places ceilings varying from 5 to 25 per cent of monthly production on rated orders that must be accepted. Other "M" orders cover uses of rubber, aluminum. (Page 24)

Expanded civil defense assignment given A.G.C. to help in plans for organizing services of construction industry in national civil defense program. Association representatives met with NSRB officials October 11. General contractors and A.G.C. chapters to have important role in plans to be announced upon completion.

More than 60 per cent of $580 million cut from general appropriation for government agencies consists of funds voted for construction purposes. Biggest amounts were from rural electrification program, reclamation projects, federal aid hospitals, and Corps of Engineers' civil works. Of more potential importance, however, were cuts in advance planning funds for local and state public works and in federal building program. (Page 25)

Texas Court decision rules contractor not liable for damages for obstructing property when reasonable obstructions were erected with consent of proper public officials. This case, in which Dallas Chapter, A.G.C., filed brief with state Supreme Court, should eliminate multitude of nuisance cases. (Page 40)

Death of Gayle G. Armstrong, A.G.C. vice presidential nominee for 1951, was blow to association and nation. More than 1,000 friends from all parts of country, many walks of life, attended funeral of this versatile and brilliant man at Roswell, New Mexico. (Page 44)

A.G.C.-sponsored reserve construction units drew high praise from Army Secretary Pace for "fine showing," "readiness," and "response to active duty orders." Congratulatory letter to A.G.C. calls them "real Engineer units." (Page 55)

Pre-election lull prevailed last month in government labor relations activity. Some appointments made to agencies and boards that would participate in wage stabilization and manpower utilization, but organizations not yet complete, nor have programs been established. (Page 49)

National Labor Relations Board and new counsel agreed on standards to govern exercise of jurisdiction under Taft-Hartley Act, will affect only those cases having pronounced impact on flow of interstate commerce. Clarification of standards as applicable to construction still required. (Page 49)

A.G.C. views on separate contracts versus the single, over-all contract voiced to convention of National Electrical Contractors Association in Los Angeles by general contractor. Meanwhile, the Special Mechanical Contracting Industries, representing specialty associations, presents memorandum to government officials and agencies criticizing policies of World War II and recommending new policies, including separate contracts. (Page 38)

Joint Cooperative Committee for Accident Prevention formed by National Association of Mutual Casualty Companies, Association of Casualty and Surety Companies, and A.G.C., to provide means of workmen's compensation insurance carriers and general contractors to consult on matters of mutual interest in construction. (Page 61)

Recent NLRB and court labor cases of importance to the construction industry are reviewed on Page 50 by A.G.C. Labor Relations Staff.

OLIVER DIESEL POWER

What better proof could you ask of the *economy* you get with the new Oliver "88" Diesel Wheel Tractor? On this job an "88" Diesel is handling *two* rubber-tired compaction rollers vs. a gasoline powered tractor of equivalent size pulling *one* roller. The owner reports a fuel cost saving of 50% even though the Diesel model was pulling a load of 39,000 lbs. vs. the Gasoline model pulling a load of 25,000 lbs.

The new Oliver "88" is a natural for industrial wheel tractor operations. It's remarkably easy to start . . . requires no starting preparations. Overall efficiency is high due to superior air and fuel mixture. Efficient burning of fuel and air assures exceptional fuel savings. Prolonged piston head pressure increases lugging ability under heavy loads.

You'll find it will pay dividends in increased load handling ability . . . lower operating costs to investigate the new Oliver "88" Diesel Industrial Wheel Tractor. Your Oliver Industrial Distributor will give you the complete story.

THE OLIVER CORPORATION

Industrial Division: 19300 Euclid Avenue, Cleveland 17, Ohio

A complete line of Industrial Wheel and Crawler Tractors

A Series of Graphs Outlining the Construction Trend

Compiled by The Associated General Contractors of America

TREND OF CONSTRUCTION COSTS

The average of construction costs in the principal construction centers of the United States for October stands at Index Number 371, according to the A.G.C. Index. The cost figure for October 1949 was 345. The 1913 average equals 100.

WAGE AND MATERIAL PRICE TRENDS

The average of wages in the principal construction centers of the United States stands at 491 for October. One year ago the average stood at 464. The average of prices paid by contractors for basic construction materials for October stands at Index Number 291. The average a year ago stood at 265. The 1913 average, again, equals 100.

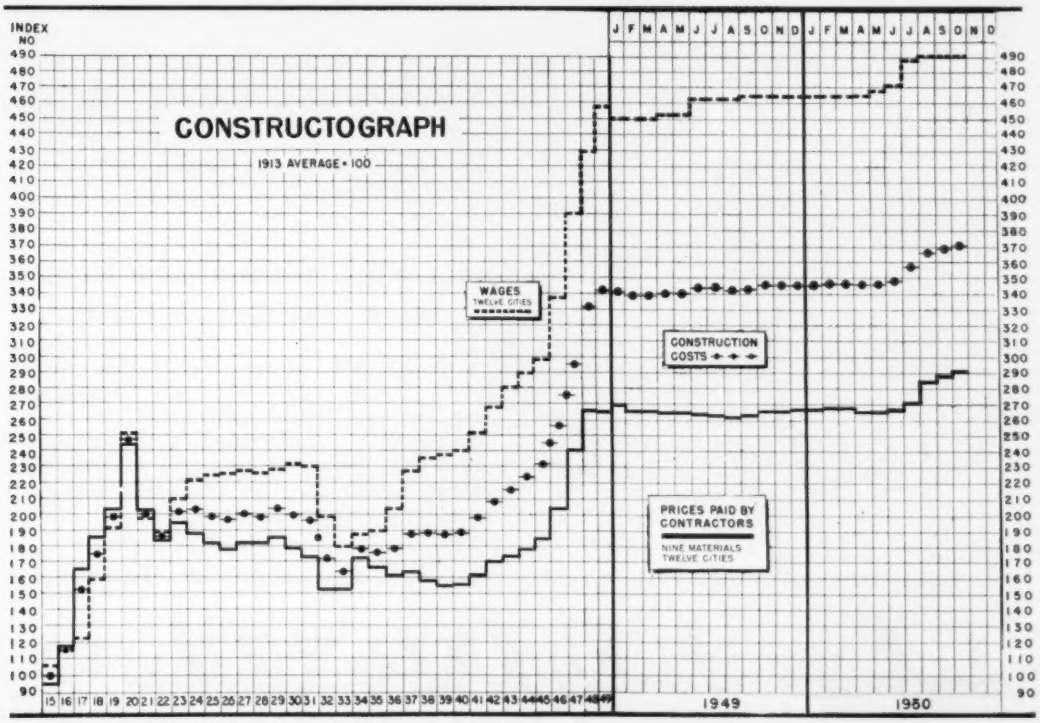
CONTRACT AWARDS IN 37 STATES

The volume of contracts awarded during September (Index Number 264, based on 1936-1938) is a decrease of 57 points from August, and an increase of 22 points above September 1949.

REVENUE FREIGHT LOADINGS

Revenue freight loaded during the first 42 weeks of 1950 totaled 31,142,487 cars. For the same period in 1949, loadings amounted to 29,560,242 cars. This represents an increase of .053 per cent.

● Wage, Material Price and Construction Cost Trends



FOSTER'S PILING RENTAL SERVICE

Starts Job Months In Advance Of *Contractor's Plans

*A joint venture of the Western Foundation Corporation and Spencer, White & Prentis, Inc. and executed under the general direction of the Stone & Webster Engineering Corporation.

"This is the first time a circular steel sheet piling cofferdam, supported by a reinforced concrete wale, has been used in this country . . . and FOSTER PILING RENTAL SERVICE enabled this job to begin months in advance.

WESTERN FOUNDATION CORPORATION and SPENCER, WHITE & PRENTIS, INC., (N.Y., N.Y.)

Foster shipped 500 tons of Interlocking Steel Sheet Piling for this Cofferdam, used in the construction of water intake for a power plant of the Union Electric Light & Power Company, Venice, Illinois.

ALL YOUR PILING REQUIREMENTS FILLED "*FASTER FROM FOSTER*"

Foster's Piling Rental Service gives you a "Head-Start" that means extra economy and extra profit by shipping immediately the exact length and exact section of piling the job demands. No deposit is required, and Foster's rental rate gives you a low fixed expense as an added competitive advantage when bidding on jobs.

Send for New Free Piling Reference Wall Chart # CP-8

Pile Hammers & Extractors (Rental) • Rails • Track Accessories • Pipe & Pipe Fabrication • Wire Rope & Slings

FASTER FROM FOSTER

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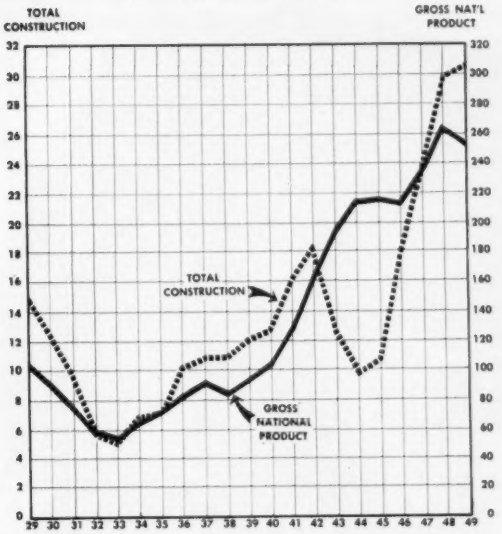
Pittsburgh 30, Pa. • Chicago 4, Ill. • New York 7, N. Y. • Houston 2, Texas

● TOTAL Construction compared with Gross National Product

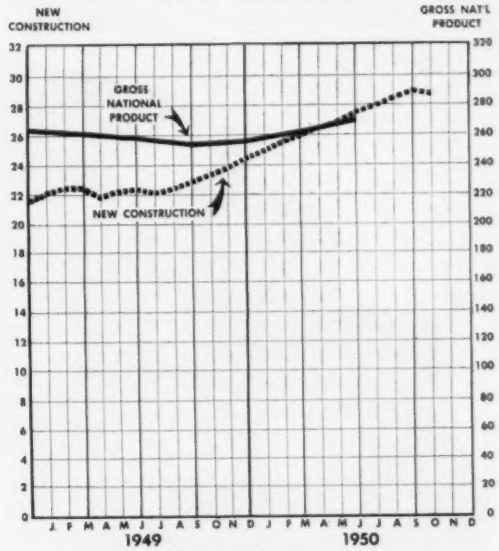
(BILLIONS OF DOLLARS)



DATA SUPPLIED BY DEPT. OF COMMERCE

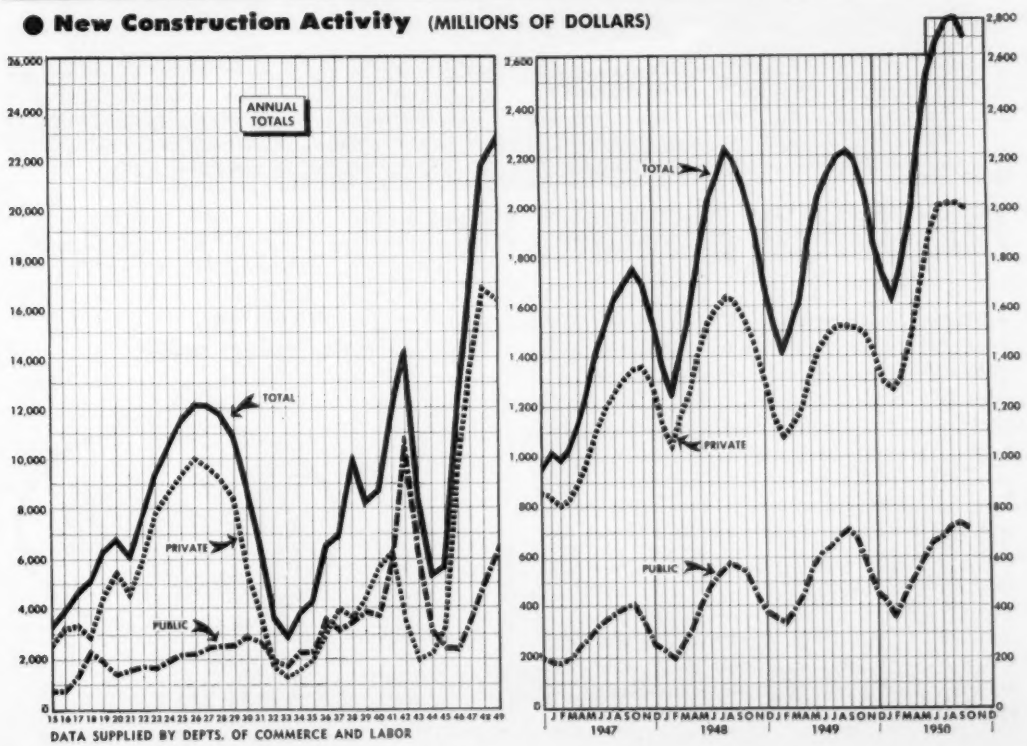
● NEW Construction compared with Gross National Product*

(BILLIONS OF DOLLARS)



** Seasonally adjusted at an annual rate*

● New Construction Activity (MILLIONS OF DOLLARS)



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Stand-Up Stamina

SUSTAINED EARNING POWER—*that's Mack*

• Wherever there's earth or rock to be moved...wherever there's need for *extra* performance, *extra* stamina, *extra* dependability—there you'll find a job that's made to order for a Mack.

Mack's proved superiority in earth moving work rests on *built-in superiority* of design and construction. In addition to their inherent power, strength and durability, Mack trucks bring you outstanding advances in maneuverability, ease of control, positive traction and maintenance accessibility.

Follow the lead of profit-wise operators who have discovered from actual experience that when it comes to working harder, lasting longer and operating at lowest cost—there's nothing to equal a Mack. Your nearest Mack branch or distributor will give you the full story on what Mack's *sustained earning power* can mean to you in greater profits through greater output at lower cost.

Be Profit-Wise

Modernize with

Mack TRUCKS

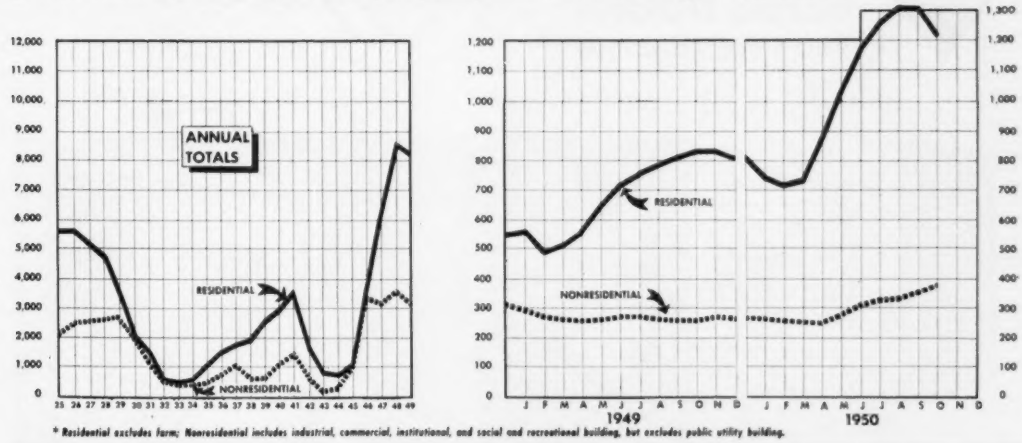
8416

...outlast them all

Mack Motor Truck Corporation, Empire State Building, New York 1, N. Y. Factories at Allentown, Pa.; Plainfield, N. J.; Long Island City, N. Y. Factory branches and distributors in all principal cities for service and parts. In Canada: Mack Trucks of Canada, Ltd.

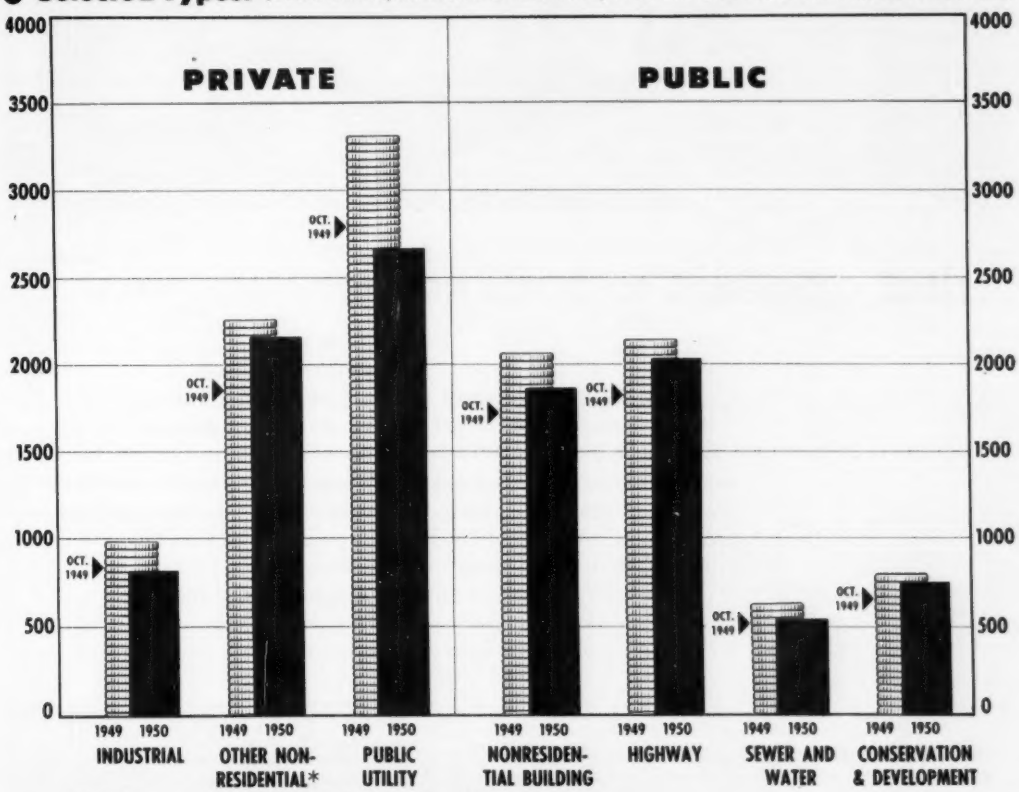
NEW CONSTRUCTION ACTIVITY

● Private Residential and Nonresidential Building* (MILLIONS OF DOLLARS)



* Residential excludes farm; Nonresidential includes industrial, commercial, institutional, and social and recreational building, but excludes public utility building.

● Selected Types: (CUMULATIVE, MILLIONS OF DOLLARS) 1949 and 1950 VOLUME THROUGH OCTOBER



*Includes commercial, institutional, and social and recreational building

TRUSCON
MARK OF MERIT PRODUCTS

TRUSCON *Residential Interior* STEEL DOORS

Swing and Slide Type

sex appeal...

SWING DOORS AND FRAMES — Series 50

Designed to compete in cost with doors of any other material or design, Truscon's new line of 6'-8" high interior flush type steel doors, in five (5) width dimensions from 1'-8" to 3'-0", are available from warehouse stocks, complete with choice of either 4¼" or 6¼" depth frames and four types of locksets.

SLIDING CLOSET DOORS — Series 50A

Outstanding economy of construction cost with maximum convenience of operation commend this space-saving door design to the architect, builder and home-owner. Sliding closet doors are stocked in two widths of 4'-0" and 5'-0". The complete door package is delivered in a protective carton.

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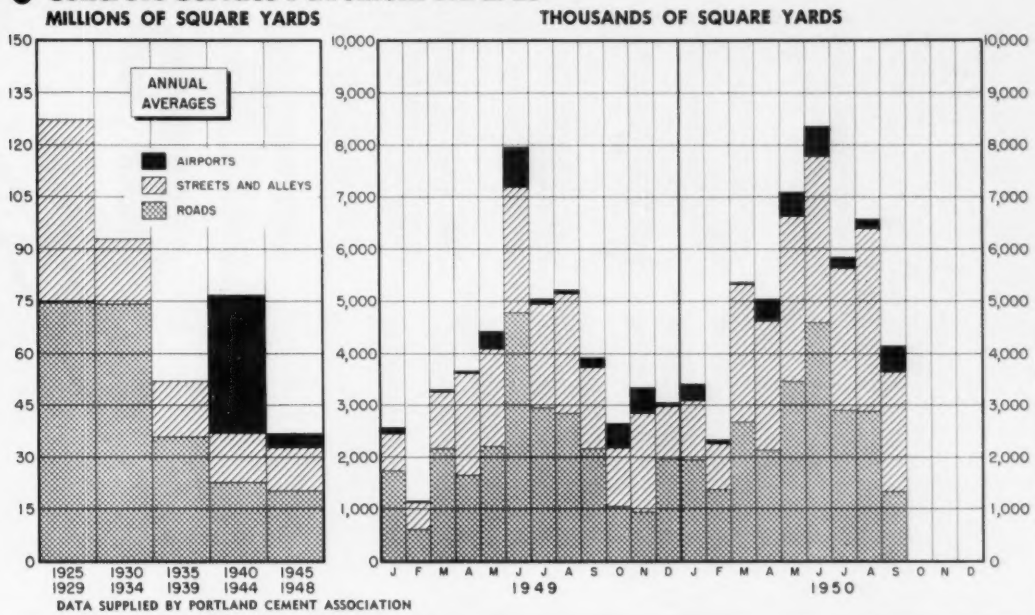
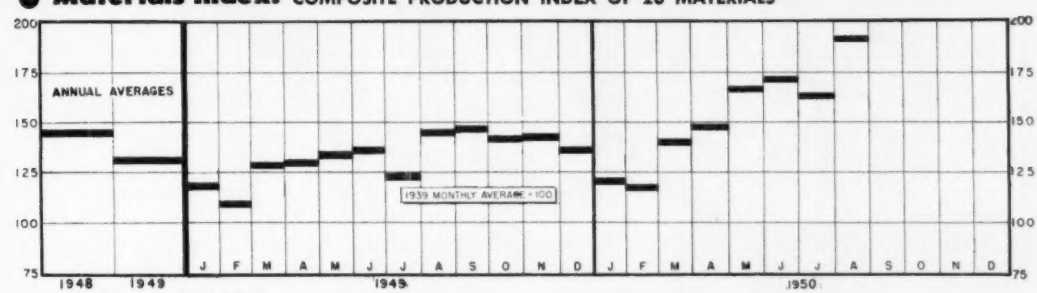


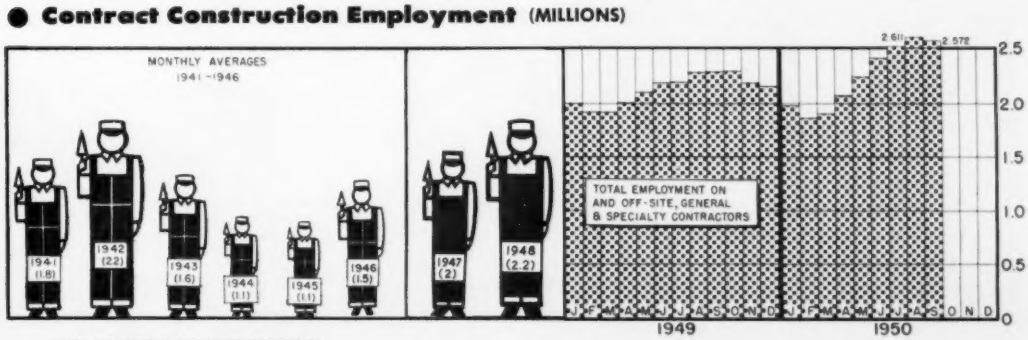
DATA SUPPLIED BY PORTLAND CEMENT ASSOCIATION

● Materials Index: COMPOSITE PRODUCTION INDEX OF 20 MATERIALS

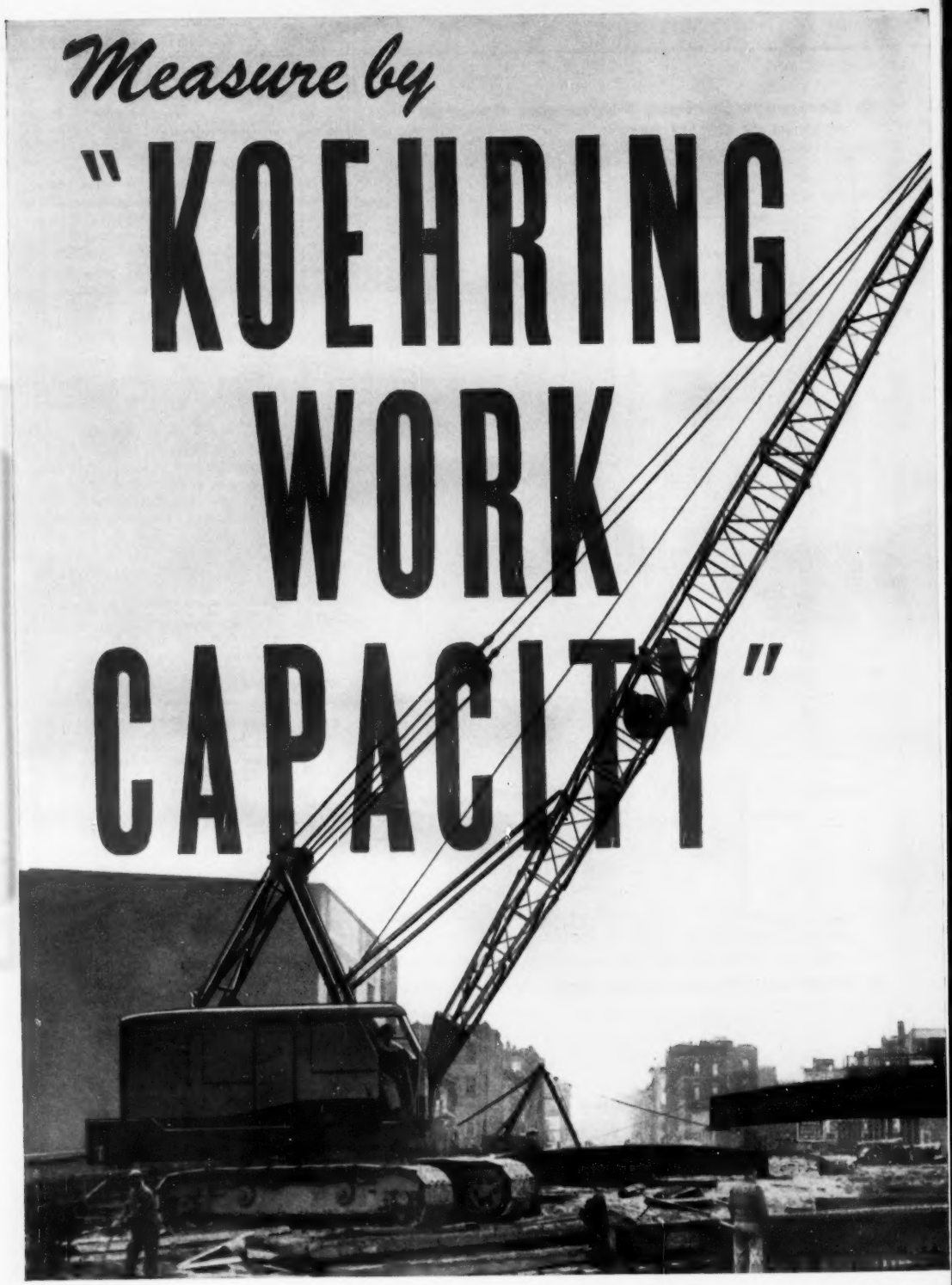


DATA BY DEPT. OF COMMERCE

● Contract Construction Employment (MILLIONS)



DATA BY BUREAU OF LABOR STATISTICS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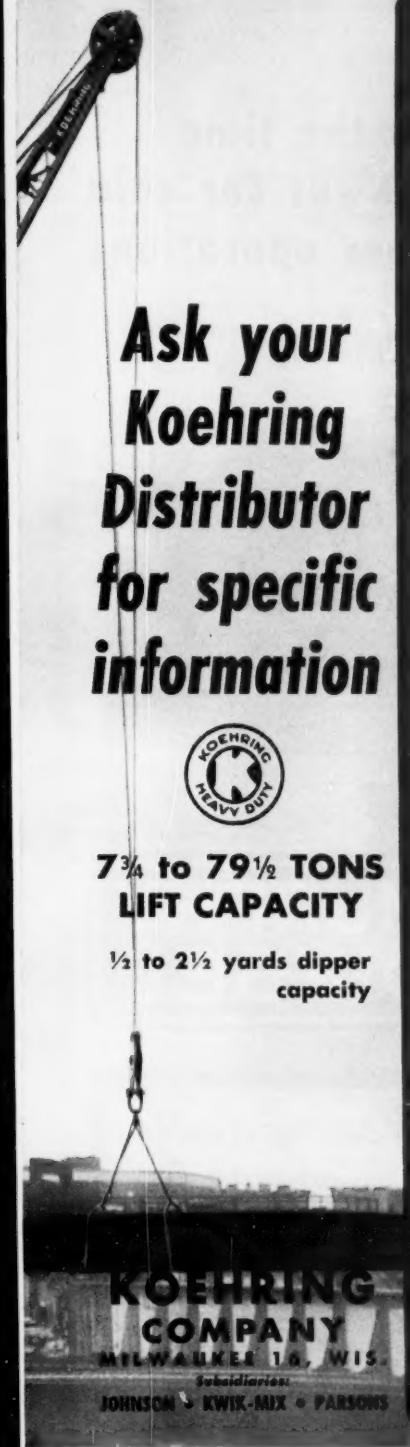

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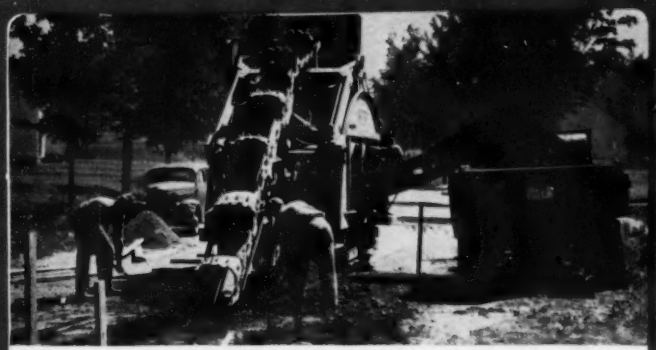

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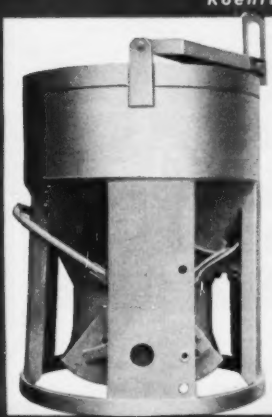

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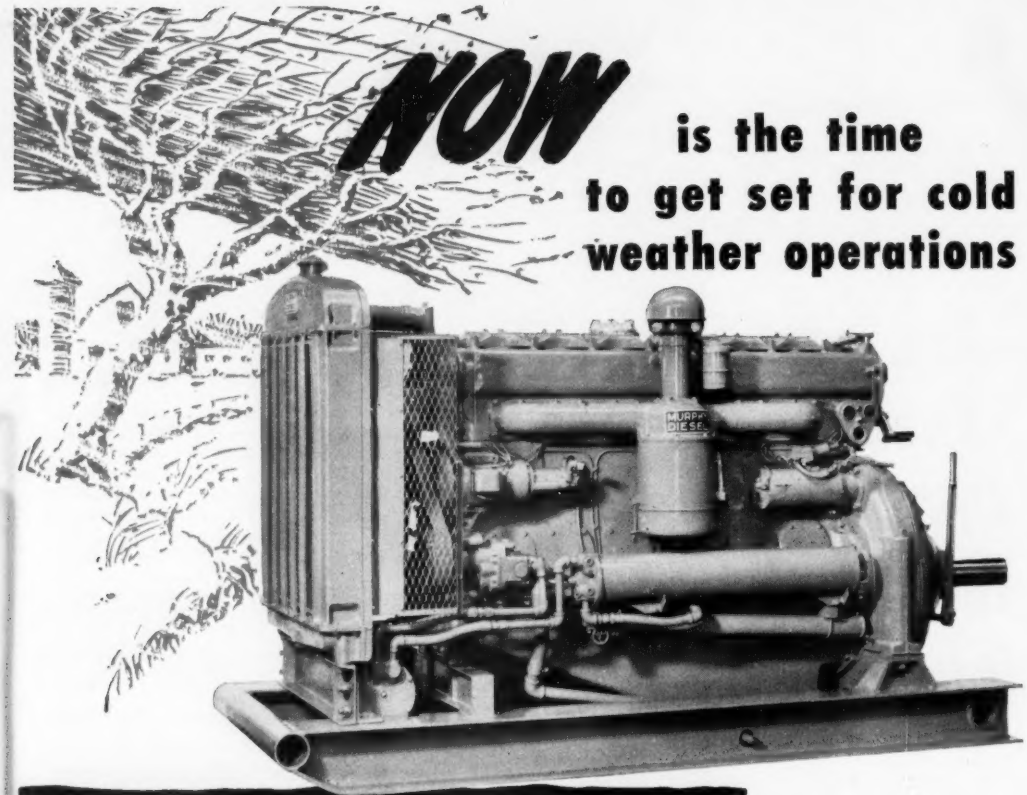

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For Moderate Income Families in Large Cities

(Formerly referred to as the "Cost of Living Index," compiled by the Bureau of Labor Statistics)

THIS table indicates the average changes in retail prices of selected goods, rents and services bought by the average family of moderate income from July 15, 1948 to September 15, 1950.

They are presented here for use by employers who may wish to take these cost of living data into consideration when contemplating adjustments of wages based on increased living costs.

The Bureau of Labor Statistics surveys 10 key cities every month and 24 other large cities quarterly. Prices are obtained on food, fuel, apparel, house furnishings and miscellaneous goods and services. Rental information is obtained quarterly only for all cities. The computations are based on the indexes for the years 1935-39, which are taken as the average of 100 points.

	1948			1949			1950		
	JULY 15	AUG. 15	SEPT. 15	JULY 15	AUG. 15	SEPT. 15	JULY 15	AUG. 15	SEPT. 15
Average	173.7	174.5	174.5	168.5	168.8	169.6	172.5	173.0	173.8
Birmingham, Ala.	177.0	179.3	178.6	171.0	171.1	171.8	175.7	177.7	179.7
Mobile, Ala.	.....	.....	177.3	.....	.....	169.2	.....	.....	172.9
Los Angeles, Calif.	170.3	171.0	171.0	167.2	166.8	167.1	168.2	169.1	169.5
San Francisco, Calif.	.....	.....	177.1	.....	.....	173.0	.....	.....	176.0
Denver, Colo.	172.5	.....	.....	167.8	.....	.....	169.5	.....	.....
Washington, D. C.	.....	169.2	.....	.....	166.0	.....	.....	168.9	.....
Jacksonville, Fla.	.....	.....	179.1	.....	.....	176.5	.....	.....	182.4
Atlanta, Ga.	.....	176.2	.....	.....	172.3	.....	.....	176.6	.....
Savannah, Ga.	180.2	.....	.....	173.3	.....	.....	177.2	.....	.....
Chicago, Ill.	178.6	178.8	179.4	173.9	174.4	175.8	179.2	180.2	179.8
Indianapolis, Ind.	176.5	.....	.....	171.0	.....	.....	175.1	.....	.....
New Orleans, La.	.....	179.8	.....	.....	173.8	.....	.....	178.7	.....
Portland, Maine	.....	.....	170.7	.....	.....	164.9	.....	.....	167.9
Baltimore, Md.	.....	.....	179.2	.....	.....	174.0	.....	.....	178.1
Boston, Mass.	168.6	168.7	169.0	162.6	163.8	165.4	168.4	168.4	168.2
Detroit, Mich.	175.9	176.1	175.4	170.4	169.9	170.4	176.2	175 1	175.4
Minneapolis, Minn.	.....	.....	173.8	.....	.....	168.3	.....	.....	173.2
Kansas City, Mo.	166.3	.....	.....	162.1	.....	.....	166.1	.....	.....
St. Louis, Mo.	.....	.....	175.0	.....	.....	168.9	.....	.....	175.0
Manchester, N. H.	178.1	.....	.....	170.0	.....	.....	173.1	.....	.....
Buffalo, N. Y.	173.1	.....	.....	169.4	.....	.....	172.0	.....	.....
New York, N. Y.	172.6	173.3	173.3	167.1	166.8	167.5	170.0	168.0	170.3
Cincinnati, Ohio	175.9	175.7	176.3	168.7	168.8	170.8	173.4	174.4	175.5
Cleveland, Ohio	.....	179.3	.....	.....	171.6	.....	.....	176.0	.....
Portland, Ore.	180.3	.....	.....	175.3	.....	.....	179.2	.....	.....
Philadelphia, Pa.	172.9	174.8	174.8	167.5	168.7	169.6	171.5	172.3	173.6
Pittsburgh, Pa.	177.8	178.3	178.3	171.9	172.4	172.3	174.9	176.4	177.7
Scranton, Pa.	.....	174.7	.....	.....	169.5	.....	.....	171.8	.....
Memphis, Tenn.	.....	.....	177.1	.....	.....	172.7	.....	.....	177.2
Houston, Texas	173.7	175.2	175.4	170.4	170.4	171.4	175.1	177.9	179.8
Norfolk, Va.	.....	176.2	.....	.....	170.2	.....	.....	177.2	.....
Richmond, Va.	168.9	.....	.....	164.4	.....	.....	168.1	.....	.....
Seattle, Wash.	.....	176.2	.....	.....	170.8	.....	.....	175.2	.....
Milwaukee, Wis.	.....	174.5	.....	.....	166.9	.....	.....	175.7	.....

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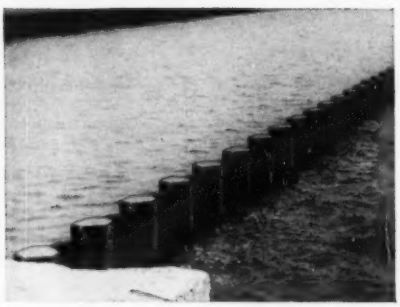

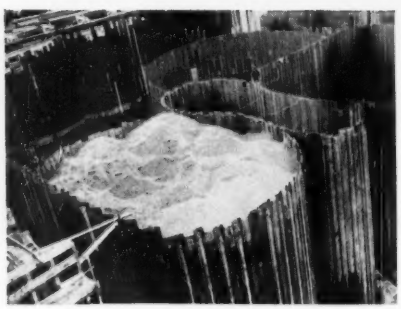

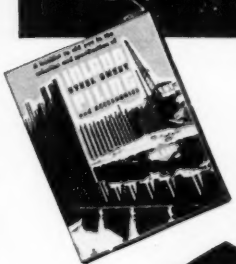

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Sidelights for Contractors

By John C. Hayes, *Legal Adviser*

Taxes

Revenue Act of 1950.—As finally enacted on September 23, 1950, the Revenue Act of 1950 increases individual and corporate income taxes, except for some corporations which will benefit from elimination of the 53% notch rate that applied to corporations with net incomes between $25,000 and $50,000 and by the allowance of a general surtax exemption of $25,000. Under the new law, corporations are taxed at a single rate on their entire normal-tax net income, the exemption of $25,000 is allowed for surtax purposes, and a single surtax rate is applicable to the balance. While no excess profits tax was adopted, it is likely that such a provision will be included in further legislation in 1951 to raise additional revenue.

Family Partnerships.—The tax court has upheld the validity of a family partnership composed of a father and his sons and has refused to tax all the family income to the father during the time the sons were in naval service, where the sons had been real working partners theretofore but the father had to pool his efforts with others during their absence. The father managed the new business with new partners, in which undertaking the credits, contracts, and equipment of the father and son partnership were used.

In another family partnership case involving military service, the tax court sustained a partnership agreement whereunder a wife carried on a commission business founded and built by her husband, who accepted a commission in the Navy. The parties intended to join together in the present conduct of the enterprise, and the husband was able, when on leave and on other occasions, to contribute vital services to the business.

In a third case, the tax court again upheld a new partnership formed by two former partners who included their wives to obtain the necessary bonds and working capital to carry out construction of a government housing project.

While husband and wife partnership questions do not arise so frequently since income-splitting by husbands and wives has been permitted, similar principles are controlling in income taxation of partnerships of other family members.

Ordinary Loss.—A circuit court of appeals has permitted stockholders to deduct in full as ordinary losses a deficiency in corporate tax which they were required to pay in a later year as transferees, although they had reported their gains on liquidation of the corporation in a prior year as long term capital gains. The court agreed with the taxpayers that the fact the losses grew out of distributions which resulted in capital gain is not decisive. The concept of the single year as the unit of income taxation is also to be considered.

Overestimated Fee.—A cost-plus-fixed-fee contractor, on the accrual basis of accounting, who overestimated his fee on a government construction project in reporting his income for 1940 and 1941, may properly deduct the amount of the over-accrual in 1942, the year in which the actual fee was determined, according to a District Court decision. There was no denial by the government of its liability, but it had disputed the amount of the fee.

Stock Option.—The tax court has decided that the amount paid by a corporation to a taxpayer not to exercise a two-year-old option to purchase stock of the corporation at a prescribed price, is taxable as a short term capital gain, since there was no "sale or exchange" within the Internal Revenue Code definition of a long term capital gain.

Deductible Expense.—Expenses paid with borrowed funds are deductible by a taxpayer on the cash basis in the year in which they are actually paid, the tax court states, and cannot be deferred until a later year when repayment of the borrowed funds is made by the taxpayer. The fact that the expenses may have been paid by a co-owner of property without the funds going through the taxpayer's hands does not alter the result, in so far as the payments were in effect loans to the taxpayer.

Employment Taxes.—The bureau's regulations have been amended to provide that amounts paid specifically, as advances or reimbursement, for traveling or other bona fide expenses incurred in the business of the employer are not wages. But traveling and other reimbursed expenses must be identified either by separate payment or specific indication of separate amounts where both wages and expense allowances are paid together.

Public Contracts

Assignment of Claims.—Where a bank received an assignment of claim under a public contract and gave timely and proper notice of such assignment to the government, the court of claims held that the bank was entitled to recover on the claim despite the government's erroneous payment to the assignor. The Assignment of Claims Act of 1940 placed the government in the same position as that of any ordinary debtor.

Liquidated Damages.—The Comptroller General has ruled that he will not recommend for favorable action by Congress under the act of April 10, 1948, a government contractor's claim for refund of liquidated damages assessed against the contractor for delay due to the latter's negligence. Strong and persuasive equities on behalf of a claimant are essential where claims are presented on equitable grounds alone.

Charitable Contributions.—A District Court allowed a government cost-plus-fixed-fee contractor to recover for charitable contributions and association dues which the contracting agency had determined were properly reimbursable but which the Comptroller General had disallowed. In the absence of fraud or overreaching, the court said, the Comptroller General does not have authority to disallow contract payments where the determination under the terms of the contract is to be made by the contracting agency.

(Property Obstruction Suit.—On Page 40, Mr. Hayes discusses in detail the significant case of the Little Stork Club, Dallas, Texas versus the Henger Construction Company for loss of profits due to obstruction of adjacent property.—Ed.)

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My name? Well, some of you fellows are working on that right now. My boss is awarding $1,000.00 in a contest to name me. Hope you've entered.

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PORTLAND CEMENT COMPANY

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Gayle G. Armstrong

WITH GENUINE grief, members of The Associated General Contractors of America mourn the death of Gayle G. Armstrong, whom they had nominated for vice president of the association in 1951. During his life he exemplified the highest ideals of our nation.

He was a gentleman. He was a good husband and father. He was a warm and loyal friend. He was a brilliant leader in his business, civic, association and public service activities. He was a substantial citizen of his community, his country, and of the industry in which he was engaged.

In the A.G.C., he took action in the belief that the association should perform work of benefit to the public, to the construction industry, and to its members. He was a living example of the association's motto of skill, integrity and responsibility.

He was a man who will not be easily forgotten, because he had the qualities for sincere, conscientious, intelligent, straightforward and positive action. He inspired respect.

Quiet and soft-spoken, he could nevertheless be a forceful advocate for the objectives which he believed worthy.

His final words to members of the A.G.C. came at the Mid-Year Meeting of the Governing and Advisory Boards at Chattanooga in September at the conclusion of his report as chairman of the Public Relations Committee.

Paraphrased, he stated that the A.G.C. can become a more positive force for the benefit of its members, the industry and the public when there is a flourishing grass roots public relations program for the association in which all of its officers, directors, members of the Advisory Board, committee chairmen and members, presidents and managers of chapters, and all those active in A.G.C. affairs take the full responsibility to secure the cooperation of all members to take an active part in improving conditions so that the industry can do a continuously better job.

Army Praise

THE Associated General Contractors of America can take just pride in the high praise extended by Secretary of the Army Frank Pace to the reserve construction units sponsored by A.G.C. chapters and branches (Page 55), and to the association for its three years' participation in the Affiliation Program.

Secretary Pace paid tribute to their readiness, their response to active duty orders, their superior technical knowledge and experience, and the facility with which they are becoming smooth functioning units after reaching training centers.

The association, its chapters and branches are mighty proud of the fine showing of the units which they have been privileged to sponsor.

Construction Controls

ADMINISTRATOR William H. Harrison, of the National Production Authority, is to be commended for the promptness with which he dispelled the confusion and uncertainty for the construction industry which had been created by the policy set forth in the original Order M-4 issued October 27.

In Section 22.2, NPA originally stated that if it became necessary to further limit types of projects which do not further the national defense or increase the nation's production capacity, "any construction commenced after the effective date of this part may be halted, even though its commencement at the present time is not forbidden by this part."

The Associated General Contractors of America, within a few hours after the order was announced, through a telegram sent by Managing Director H. E. Foreman after consultation with the officers, pointed out that this placed in "serious jeopardy" projects undertaken after the effective date, without a clarification of intent by NPA or a means of ruling on each individual project. This could have been very harmful to the industry.

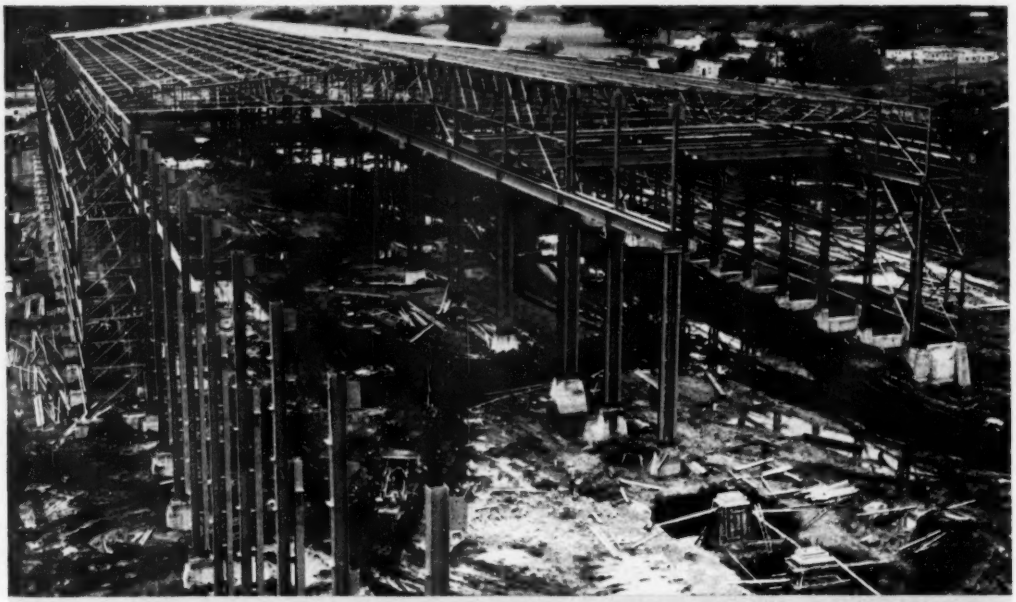
A meeting of representatives of all parts of the construction industry on October 30 demonstrated that the entire industry shared grave concern over this policy.

On October 31, Mr. Harrison revised the order to state that "in the event that increasing material shortages clearly indicate the necessity for such action in the national interest, NPA may further limit the commencement of additional types of projects which do not support the defense effort or increase the nation's productive capacity."

This policy is satisfactory to the industry. It accomplishes the objectives of both the industry and the government. The construction industry, financial institutions, owners and public officials should be thankful to Mr. Harrison for making this amendment promptly.

The construction industry takes pride in its past and present accomplishments for the national defense. It was mobilized 75 per cent for war work by the time of Pearl Harbor, and completed work valued at more than $49 billion at unprecedented speeds for World War II. It is now taking important action for national defense.

NPA, and other government agencies, will find that when they consult in advance representatives of the construction industry, they will find them true Americans, and ready to recommend means whereby the objectives of the government can be achieved and the least possible disruption be made to industry operations so that the industry can continue to execute its essential operations with maximum efficiency.



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NPA's Policy on Construction: Going Projects May Continue

- Amusement and Similar Work Curtailed
- May Later Limit Start of Other Types
- Harrison Amends Original "Scare" Order

» THE NATION'S partial mobilization program unfolded during October as emergency controls were placed over construction and other industries. Principal developments were:

• The policy of direct limitation of the commencement of types of construction which do not further the defense effort or increase the nation's productive capacity, as it is required for the conservation of materials, was inaugurated by the National Production Authority. First types of construction limited were for amusement, entertainment and recreational purposes.

• The policy of depressing the volume of new construction by means of controlling real estate credit was inaugurated by the Federal Reserve Board, and other government agencies, through restrictions on credit for one and two-family houses.

• A priorities system to speed the flow of materials to defense projects was initiated, providing for a single DO (Defense Order) rating, which can be extended by prime contractors to subcontractors and suppliers. It applies initially to approved procurement and construction programs of the Defense Department and Atomic Energy Commission.

• Orders to regulate the flow of some basic materials to defense production were issued. These applied first to steel, rubber and aluminum, with others expected in the near future.

NPA Order M-4

The policy that the commencement of types of construction "which do not support the war effort or increase the nation's productive capacity" will be limited "in the event that increasing material shortages clearly indicate the necessity for such action in the national defense", was established in NPA Order M-4 issued October 27 by the National Production Authority and revised October 31.

The order sets the pattern for possible future limitations on the commencement of other types of construction. Initially the order prohibits the commencement of 44 specific types of construction for entertainment, amusement and recreational purposes. (See story on Page 24.)

Scare to Industry

As first issued, the order carried a scare for the construction industry when Section 22.2 was stated as follows:

"It will be the policy of NPA to further limit or prohibit construction of additional types of projects which do not further the defense effort or increase the nation's production capacity, when such action is deemed necessary in the interest of national defense to minimize material shortages. If such action becomes necessary, any construction commenced after the effective date of this part may be halted, even though its commencement at the present time is not prohibited by this part."

Managing Director H. E. Foreman, of The Associated General Contractors of America, after consultation with the officers, immediately telegraphed Administrator William H. Harrison, stating that this policy placed in "serious jeopardy" construction undertaken after effective date of the order. (See text of telegram on this page.)

Administrator Harrison replied by letter, but this made no apparent change in the policy originally set forth in the order.

President Walter L. Couse and Mr. Foreman explained in further detail the harmful effects of this policy in addressing the annual convention of the A.G.C. Carolinas Branch and a meeting of the A.G.C. of West Virginia on October 30.

The same day the Subcommittee on Construction Mobilization of the

Telegram from A.G.C. Managing Director H. E. Foreman to William H. Harrison, National Production Authority Administrator:

Your Order M-4, October 27, 1950, Part 22, Construction, contains the following language:

(Quotation of Section 22.2 of Order M-4, in adjoining article)

This has the effect of placing all construction to be undertaken from this date on in serious jeopardy pending the ruling on each individual project as to whether it meets conditions set forth in language quoted. This far more drastic in effect than anything applied during World War II. Feel it dangerous to entire construction industry to undertake new work in absence of positive rulings by your office. Request immediate advice how such applications and positive rulings can be processed and expedited. This request made under instructions officers this association.

Text of NPA Press Release Dated October 31:

In response to questions raised about the spirit and language of NPA Order M-4—as it applied to possible future NPA orders which may be found to be necessary limiting commencement of further types of construction—W. H. Harrison, Administrator, today declared that NPA has no intention of adopting a policy of halting construction which may then be underway. Order M-4 has been revised accordingly.

Section 22.2 in Order M-4 as revised now reads: *"Policy of the NPA.* In the event that increasing material shortages clearly indicate the necessity for such action in the national interest, NPA may further limit the commencement of construction of additional types of projects which do not support the defense effort or increase the nation's productive capacity."

Mr. Harrison expressed regret that this phase of the original order had caused concern in the construction industry and emphasized that it will continue to be the policy of NPA not to interfere with production and construction unless such action is clearly indicated by immediate defense needs.

Chamber of Commerce of the United States had Mr. Harrison as its guest. Representatives of all branches of the construction industry were as critical of the NPA policy as the A.G.C., and for the same reasons.

Revised M-4

On October 31, the NPA issued a statement and revised Order M-4 in a manner which was satisfactory to the construction industry. The press release stated that it will "continue to be the policy of NPA not to interfere with production and construction unless such action is clearly indicated by immediate defense needs." (Full text of NPA statement on page 23.)

Managing Director Foreman commended Mr. Harrison for the change which was made in the policy, and on behalf of officers of the association offered continued cooperation of the A.G.C.

Marshall on Radio

On Friday evening, October 27, James D. Marshall, A.G.C. assistant managing director, appeared on the Mutual Broadcasting System's "Mutual Newsreel" to explain the crippling effect of Section 22.2 of Order M-4 as originally constructed.

He stated, in part:

"The announced threat of stoppage of any type of project that government officials in the future may deem unnecessary to national defense or to increased production affects the entire national economy, because almost every form of our civilized life requires some form of construction.

"We believe that the cancelling of many types of construction projects at this time—which is possible because of the uncertainty of what types of work can proceed without stoppage—would deal a shocking blow to the entire national economy, and therefore, to national defense."

Others appearing on the same broadcast included: Army Surgeon General R. W. Bliss, Brig. Gen. Merrill O. Twining, and Turkish Prime Minister Adman Menderes, who spoke by short wave from Ankara.

Order M-4 Stops 44 Amusement Types

• No Provision for Approval of Project Applications

» THE DIRECT limitation of the commencement of types of construction which do not further the defense effort or increase the nation's productive capacity was inaugurated by the National Production Authority in Order M-4, issued effective October 27.

It prohibits the commencement of 44 specified types of construction for amusement and recreational purposes, such as amusements parks, theaters, race tracks and stadiums, and for "any other recreational, amusement or entertainment purpose, whether public or private."

This order differs from Limitation Order L-41 of World War II in that it flatly prohibits the start of the limited kinds of construction, except that a person may appeal in the event of "unreasonable hardship." No provision has been made for approval of applications for projects.

The prohibited types of construction for amusement purposes are listed in the order in List A. Presumably, future actions of the NPA in limiting further types of construction will be to add to List A.

Exemptions to the order for construction in connection with projects in List A are: (a) maintenance and repair; (b) small jobs in connection with any such structure, including alterations, additions or improvements, "where the cost of all such work shall not exceed $5,000 in any consecutive twelve months' period"; (c) restoration of any such structure following a disaster, an act of God or an act of war; and (d) construction for the Atomic Energy Commission or Defense Department.

Regulations for Basic Materials Announced

• DO Rating Authority Given Defense Department, AEC

» A PRIORITIES system to speed the flow of materials to defense projects was established, and orders to regulate the flow of some basic materials to defense production have been issued by the National Production Authority.

The priorities system, established by NPA Reg. 2 October 3, provides a single DO (Defense Order) rating, which can be extended by prime contractors to subcontractors and suppliers.

Authority for the Defense Department and Atomic Energy Commission to apply the rating to their authorized procurement and construction programs was delegated by NPA in Delegations 1 and 2, October 3.

NPA Reg. 2 prohibits persons receiving DO ratings from extending them for the purpose of securing materials for plant construction.

NPA Delegation 1 does not permit the Defense Department to extend ratings for the purchase of construction equipment. NPA Delegation 2 permits the Atomic Energy Commission to extend the rating only for purchase of construction equipment which will be property of the commission.

Contracting officers of the agencies will, in most cases, automatically issue ratings for new and previous defense contracts.

Materials

Orders have been issued to speed the flow of some basic materials to defense production. Others are expected. One purpose of the orders is to provide for economic scheduling and equitable distribution of rated orders among producers.

NPA Order M-1, effective October 12, provides rules for placing, accepting and scheduling rated orders for steel. It permits producers to reject rated orders received less than 45 days before the first day of the month in which shipment is requested. It also places ceilings on the amount of rated orders which need be accepted. These vary from 5 to 25 per cent of monthly production depending on type of product.

Order M-2 controls the use of natural and synthetic rubber. Order M-3 controls columbium bearing steels for delivery only under DO ratings. Order M-5 provides for the placing, accepting and scheduling of rated orders for aluminum, requiring that producers and fabricators must accept rated orders for 6.5 to 40 per cent of monthly production, depending on the type of product.

Construction Curbs Begin with Credit

• Housing First; Other Types under Consideration

» INDIRECT CONTROLS on new construction have begun with the issuance of real estate credit limitations on the purchase of one and two-family dwellings.

Indicating that credit controls would be used to suppress other types of building construction, one official stated, "Other types of construction not essential to defense must also be kept under control and inflation checked at every point throughout the economy. Some steps have been taken toward these ends, and others are being worked out for early use or to be in readiness when needed."

Regulation X, issued and to be administered by the Federal Reserve Board, imposes restrictions on all types of private financing of homes built after August 3. It became effective October 12, establishing minimum down-payments and maximum maturity dates to which all lenders must conform.

Effective the same date are changes in the loan guarantee schedules of the Federal Housing Administration and the Department of Agriculture which make their programs identical to the provisions in Regulation X.

VA loan changes are similar to Regulation X but require less down payment and grant a 30-year mortgage term to veterans who cannot meet an amortization rate based on 20 years but can meet payments based on the longer term.

The controls were issued for the stated purpose of fighting inflation and easing the flow of materials for defense construction and production.

For homes costing from $5,000 to $9,000, the down payment for non-veterans ranges from 10 to 21 per cent. Homes costing from $10,000 to $15,000 require from 23 to 28 per cent for a down payment. The scale for down payments then increases at the rate of approximately two percentage points per thousand dollars until the maximum of 50 per cent is reached at $24,250.

Controls Checklist

A monthly checklist of governmental laws or regulations issued in the mobilization program.

NPA Regulation 2 establishes a priority system for materials. Effective October 3.

Authority to apply defense order ratings for procurement and construction delegated to Department of Defense and Atomic Energy Commission October 3.

FRB Regulation X and companion government guarantee schedules curb housing credit. Effective October 12.

NPA Order M-1 fixes maximum percentages of production of steel which must be used to fill rated orders. Effective October 12.

NPA Order M-3 limits use of columbium bearing steel to filling rated orders only. Effective October 19.

NPA Order M-1 Supplement directs certain steel producers to fill certified orders for construction and repair of freight cars. Effective October 26.

NPA Order M-4 bans amusement construction and provides for limiting of any non-essential construction when necessary. Effective October 27.

NPA Order M-5 fixes maximum percentages of production of aluminum to be used to fill rated orders. Effective October 27.

NPA Order M-2 limits consumption of natural and synthetic rubber and allocates quantities for government procurement. Effective November 1.

60% of Budget Cuts in Construction Funds

• $580 Million in Reserves Impounded from Appropriations

» MORE THAN 60 per cent of the $580,271,335 cut from the general appropriation for government agencies last month consisted of funds voted for construction purposes.

Hit hardest in amounts reduced were the rural electrification program, reclamation construction, federal aid hospital program, and the Corps of Engineers' civil works activities. Probably of more significance in terms of potential construction nationally, however, were cuts in the amount of funds for advance planning of state and local public works, and in the General Services Administration's program of acquiring sites and planning federal public buildings.

The Budget Bureau impounded, or "reserved" the funds from appropriations, but announced a "margin of error" must be allowed for in the operation, that it may be necessary later to release some of these reserves, and that it also is probable that opportunities will be found for savings in other areas.

Principal construction cuts are as follows:

Army Corps of Engineers—$50 million. Power projects will proceed "at a rate designed to bring in additional electrical generation in accordance with schedules contemplated in the 1951 budget," and no going contracts are to be stopped.

The Engineers subsequently announced projects in its $618.5 million program, including $12.9 in the supplemental appropriation. (The Engineers' appropriation was lump sum, so no specific projects were cut by the action.)

Interior Department (*Bureau of Reclamation*)—$56 million from construction and rehabilitation program, including $6.9 million more than the Budget Bureau required. Hit hardest are the Davis Dam, Central Valley, and Missouri River Basin projects.

In addition, these construction funds were cut from other Interior bureaus:

Bureau of Indian Affairs—$5.8 million.

Office of Territories—$1.1 million for Alaskan roads; $1 million for Alaskan public works; and $1.5 million for Virgin Islands public works.

National Park Service—$3.2 million for parkways, roads, trails, etc.

Department of Commerce (*Civil Aeronautics Administration*)—$15.5 million for federal airport program.

Housing and Home Finance Agency—$15 million for advance planning loans for state and local public works.

General Services Administration—$19 million for acquisition of sites and planning of public buildings.

Public Health Service—$75 million for federal aid hospital construction grants.

Department of Agriculture—$24.5 million for farm tenancy and housing loans; $66.4 million for electrification loans; and $19 million for rural telephone loans.

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Fena River Dam in Guam Built In Race with Seasonal Rains

- Resume Work After Delay Since Last May
- Tough Engineering Problems Met on Job

» AN EARTH-FILLED dam across the Fena river in Guam had to be high enough to withstand the floods of the impending rainy season. To accomplish this engineering miracle in time, the Navy's civil engineers and their contractors threw away the watch and the calendar and put in 24 hours a day for seven days in the week. When the first typhoon struck with 80-knot winds and six inches of rainfall on May 9, the progress made in drying and compacting the moist volcanic soil had brought the dam to a safe height.

The reservoir formed by this dam is expected to yield seven million gallons per day in an average rainfall year and a minimum yield of five million in a dry year. Work will be resumed on the project this month.

Not Notable for Size

While the Fena dam is not noteworthy for size, its design and construction presented some unusual problems. The critical foundation conditions and the special treatment required to prepare the borrow material for use in the impervious sections of the dam have been met by the designers, Pacific Island Engineers Inc., and the builders, Brown-Pacific-Maxon. The Maxon of the combination is the Maxon Construction Company of Dayton, Ohio of which A.G.C.'s vice president, G. W. Maxon, is the head.

The job is under the U. S. Navy Bureau of Yards and Docks with design and construction initially under the supervision of Captain E. L. Hansen and later Captain A. J. Fay as officer in charge of construction for the Civil Engineer Corps.

The Fena river project is Guam's first permanent fresh water supply and will replace the many existing temporary sources on the island.

Borrow material for the impervious core of the 1,600,000 cubic yard structure is a plastic clay with unusually low density and a 65 per cent moisture content. This had to be scarified in the borrow pit to dry it down to 50 per cent moisture content before placement. Fully compacted this material weighs only 70 pounds per cubic foot.

Even in the so-called dry season, drying the fill was not a simple matter. Frequent rains persisted and 0.2 inches of rain was sufficient to delay work a whole day. Records show an average annual rainfall of nearly 100 inches at the site. From 13 to 15 inches per month fall in the rainy season which runs from July to October. The typhoon in May this year was unseasonal.

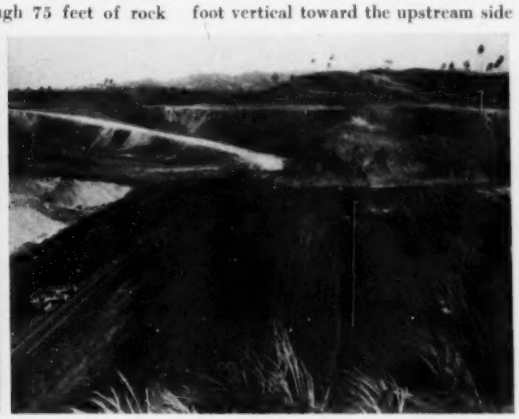
Construction gathered momentum when work was resumed with the return of the dry season last fall. By this time the excavation work was well under way. Experienced crews operating scrapers, bulldozers, rooters and a grader went to work taking the spillway excavation from 175.5 feet at the throat down through 75 feet of rock and earth to a depth of 80 feet at the base. The entire job required the removal of 240,000 cubic yards of material.

The main section of the dam was being excavated simultaneously to a depth of nine feet below sea level and 50 feet below the surface of the valley. This excavation started with a cut-off trench which was expanded to the full bottom width of 200 feet.

Since it had been found that bedrock lay 90 feet below the valley floor, it was decided to dig down only 50 feet to an overlying stratum of gravel and make this and the underlying rock impervious by a grout curtain.

Approximately 250 grout holes were drilled on 10- to 40-foot centers to depths of from 60 to 100 feet. Grout was pumped under various pressures to form a grout blanket which filled every crevice, hole and interstice in the gravel underlying the dam site.

The job of filling this excavation with impervious earth followed. This was spread in layers of about six inches and then compacted by king size sheeps-foot rollers. From the 200-foot width at the bottom the excavation embankment was laid at a ratio of three feet horizontal to one foot vertical toward the upstream side



(Left) Night scene at the Fena River damsite showing the brilliant illumination which permitted the Navy's civil engineers and the contractors' forces to work round-the-clock in their race with the rainy season. (Right) Earth which has been dried to less than 50 per cent moisture content is compacted by heavy equipment to provide the impervious fill. What appears to be palm trees are part of the 1500-foot string of lights.

of the dam and at a slope of two to one toward the downstream side.

As the dam grew in height, frequent piezometer readings were taken, with the well point of the lower end fixed in the foundation soil as a safeguard against placing the impervious fill and the filter and quarry run rock blankets at a rate faster than the underlying material could be sufficiently consolidated.

During construction, the Fena river was diverted through two 30-inch pipes. Temporary pumping is done by a station on a 20 x 40 foot tank barge. It has a capacity of 2,000 gallons per minute. A permanent pumping station with a capacity of 7½ million gallons per day is under construction at the downstream end of a tunnel which has a capacity of 1,000 cubic feet per second.

Job Lighted at Night

To make work at night possible, 1,500 foot strands of powerful lights were strung from the top of the dam abutments to illuminate the entire site. This was augmented by batteries of portable floodlight units.

The dam will be approximately 1,100 feet long and 700 feet wide at the base. Its crest will be 81 feet above the valley floor. It will create a lake two miles long and varying in width to well over half a mile. The project will be completed in January 1951.

At the intake or upstream end of the diversion tunnel, work began in February on the erection of an intake tower and screen house. This tower, when completed, will be 111 feet high, making it Guam's only skyscraper. A travelling screen will operate within the tower from an elevation of 66.35 feet to a maximum high water level of 121.35 feet. Normal high water elevation of 111.35 feet is at the same level of the spillway.

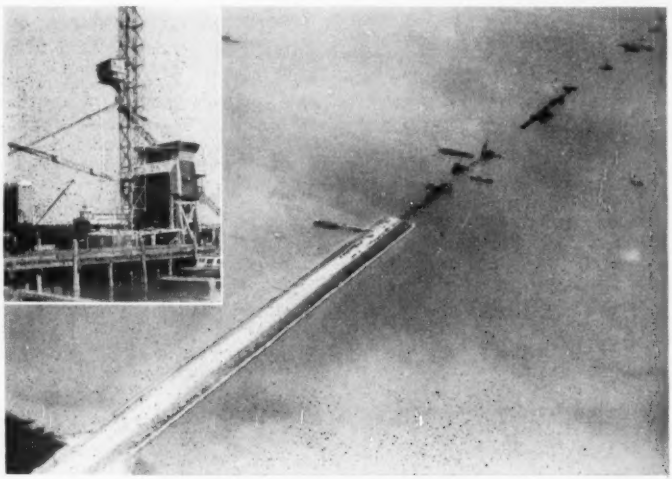
The spillway, which will be 80 feet wide, is designed to handle a flood capacity of 18,000 cfs, which is the maximum expected of the most severe typhoons which strike the island. Considerable rock excavation was necessary to provide proper foundation for the spillway and the stilling basin at its downstream terminus.

From an engineering viewpoint, the most spectacular aspect of the construction has been the speed with which the earth has been spread and compacted.

Equipment Marks Outline of Bay Bridge

» A HUGE flotilla of marine construction equipment, said to be the largest ever assembled on the Atlantic seaboard, now outlines the path of the 4.3 mile highway bridge across Chesapeake Bay linking Sandy Point with Matapeake on the Eastern Shore. As will be noted from the accompanying aerial photographs, the Sandy Point section juts straight out for over half a mile before making a dogleg to the left. This is to have the bridge cross the diagonal ship channel at right angles.

The project, which will be completed in the Summer of 1952, is financed by a $43,900,000 bond issue. A number of A.G.C. firms are participating in the construction which goes on simultaneously from both shores.



Aerial Views-Dick Darcey

(Lower) Bridge construction as proceeding from the Sandy Point shore, with the famous Matapeake ferry slip in foreground. (Upper) Bridge work from the Matapeake shore. (Inset) One of the big cement batching plants.

I said to the b[illegible]:

"Let me tell the world about that

LINK-BELT SPEEDER HC-90

I watched in Montana."

"Go ahead," he said.

On June 30, 1949, Anderson Construction Company of Great Falls signed the largest single contract ever let by the Montana Highway Commission. This was to construct a bridge across the Missouri River and railroad tracks south of Great Falls.

First equipment on the job was their Link-Belt Speeder HC-90 Truck Mounted Shovel-Crane . . . and it remains the busiest equipment on the job. It's used for pouring concrete, driving piles, excavating from coffer dams with a clamshell, and setting structural steel. She works with style on all of these jobs.

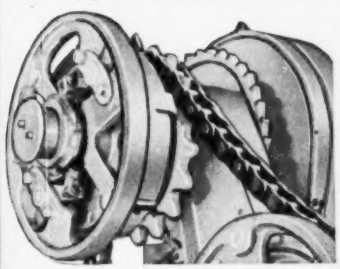
Woody Sherman, an operator for 15 years, told me: "The HC-90 is superior to anything I've ever operated in the past . . . And that covers a lot of territory."

Superintendent Bob Millinsifer said: "The HC-90 is giving an outstanding performance on clamming, form handling, steel erection, and pouring concrete. I'm more than satisfied with it."

I'll tell the world: the **HC-90** satisfies.

12,179

There's Speed With Safety In The Independent Rapid Boom Hoist



The Independent Rapid Boom Hoist is positively geared to the engine, both in raising and lowering the boom. Therefore, a wide range of controls is obtainable by throttling the engine. This hoist assures safety for accurately spotting the load, where perfect control is required when constantly raising and lowering the boom. The reversing main hoist drum, available for crane work, permits the operator to pay out cable easily to return the hook quickly for the next lift.

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SHOVELS-CRANES-DRAGLINES

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DB-35 DRIFTER and 48" ALUMINUM SHELL

SAVES THREE WAYS!

1

28% LESS AIR
with the NEW DB-35 Drifter

Ingersoll-Rand's new DB-35 Drifter, with the patented double-kicker port valve, has been especially designed to increase operating economy. Tests prove that this new drifter actually requires 28% *less air* per foot of hole drilled! What's more, the new design has resulted in stronger rotation, better hole cleaning ability and improved feeding qualities. These combined features give you a rugged, heavy-duty drifter that will even surpass the record-breaking performance of Ingersoll-Rand's famous DA-35 Drifter.

2

33% FEWER STEEL CHANGES
with the NEW Lightweight 48-inch Aluminum Shell

The greater length of this new shell permits the use of longer drill steels—with 33% fewer steel changes for a given footage. Its lightweight all-aluminum construction cuts shell weight almost in half! In fact, it's even lighter than the old-style 30-inch steel shell and has equal or better life. This light weight is particularly important when drilling from a column or bar.

3

50% MORE DRILLING SPEED
when Carset Jackbits are used

These longer-wearing, faster-drilling Carset Jackbits, tipped with tungsten carbide, enable you to take *full advantage* of the potential savings offered by the new I-R drifter combination. Often drilling speeds can be increased by 50% or more, tonnage can be boosted 20% or better and dynamite requirements can be cut as much as 30%. These savings, together with the many other proved advantages of I-R Carset Jackbits, set an all-time high in economy and performance.

THIS COMBINATION *is ideal for use with the famous I-R Drill Jumbo Mounting. For complete information check with your nearest Ingersoll-Rand office today. Let our engineers tell you more about this new cost-cutting combination.*

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Shell Fill Converting Canal to Expressway

• 700,000 Cubic Yards Placed in Eight Feet of Water

» FROM SHIPS and barges to automobiles and trucks is the changed role the hundred-year-old New Basin Canal in New Orleans will play in that city's commerce and transportation. The right-of-way of the state-owned canal property, 300 feet in width, is being backfilled for a distance of 1.944 miles, from the Baton Rouge-New Orleans Airline Highway to Clairborne Avenue, to be part of the Pontchartrain Expressway.

The fill is being done by Jahncke Service Inc., A.G.C., New Orleans, low bidder. When completed, the improvement will consist of two 36-foot express roadways and two 32-foot service roadways. The Pontchartrain Expressway, a part of the arterial plan for New Orleans, will connect with the proposed new high-level Mississippi River Bridge.

700,000 Yards of Shell

The fill, which utilizes shell, long used in Louisiana for both surface and base course construction, will require in excess of 700,000 cubic yards, having an average depth of from five to 15 feet with the greater part of this mass to be placed in eight feet or more of water. This is believed to be one of the largest shell fills ever undertaken. The shell is obtained from the bottom of Lake Pontchartrain and is transported approximately 25 miles to the site in 30 barges.

To fix and stabilize the material at the bottom of the canal, a layer or blanket of washed shell from three to five feet in depth is deposited over the entire width of the canal. This blanket is in place and completed at all times from 400 to 600 feet ahead of the other filling operation. When the main part of the fill is brought above water, a bulldozer is used to spread, level and vibrate the mass so as to effect a consolidation of the material. It appears that the operation of the bulldozer at or slightly above the water assists greatly in this consolidation.

Work on filling the canal began on May 12, 1950 and the contractor has averaged about 80 linear feet per day and deposited approximately 5,000 cubic yards per day, working three eight-hour shifts.

The project at this time is only 50 per cent complete and ultimate results cannot be predicted. It is noted, however, that one section of the canal fill now taking city cross traffic indicates that the material has excellent stability.

New Basin Canal before and after filling operations.

Work order for the construction was issued December 19, 1949. Contract items amounted to $1,375,851.37, with one per cent added for engineering and contingencies. The select fill price was $1.79 per cubic yard. After the award of contract, Jahncke Service requested and was granted permission to substitute shell for select fill materials which are not available in that vicinity.

In describing the project at the meeting of the Southeastern Association of State Highway Officials in Louisville, Kentucky, October 5-6, W. J. Hughes, construction engineer of the Louisiana Department of Highways, said, "With the job controls we have established, it is hoped that data may be obtained over a period of time that will provide a better understanding of clamshell as a fill material and the behavior of this material when placed under the circumstances described."

Increase in Costs, Bids

The highway composite mile cost index for the third quarter of 1950 is 4.4 per cent over the previous quarter, tentative figures from the Bureau of Public Roads disclose.

This is the first rise registered since the postwar peak was reached in the fourth quarter of 1948, after which the index declined for almost two years. The third quarter index is placed at 146.2, which is 1.7 per cent below a year ago and 11.6 per cent below the postwar peak.

Keen competition for federal-aid construction contracts also was reported by the bureau. During the first eight months of the year, the number of bids per project on such work averaged 6.2. For the past four years, the average number has been as follows: 1946, 3.9 bids; 1947, 3.8 bids; 1948, 4.2 bids; and 1949, 6.3.

Contract Termination Clauses Recommended

• A.A.S.H.O.-A.G.C. Group Cites Defense Value of Highways

» INCLUSION of termination clauses in highway construction contracts was recommended last month by the joint cooperative committee of the American Association of State Highway Officials and The Associated General Contractors of America at Louisville, Kentucky. The conference, held in conjunction with a meeting of the Southeastern Association of State Highway Officials, learned that several states, among them California, Pennsylvania, Missouri and Kansas, had already set up machinery for contract termination. These clauses are important in long term contracts.

No general agreement was reached in the matter of escalator clauses because of the many uncertainties encountered in attempting to utilize escalator provisions. However, an escalator clause in connection with freight rates was thought desirable.

Lowered productivity of labor, loss of key men to war industries and the draft were anticipated as cost increase factors.

Better flagmen for better public relations was advocated by the joint committee, which heard the plan worked out by the Minnesota State Highway Department and the A.G.C. of Minnesota.

The liability of the contractor in damage suits in cases where a section of the highway is opened to traffic before the whole project was finished, was reviewed. State highway departments were urged to assume this liability and to assure greater assistance from the state highway patrols. Some state regulations were seen to be obsolete as to the amount of the contractor's liability insurance.

It was agreed that a large volume of highway construction was needed for an adequate and logical defense program. Public support for this can be secured through publicity. Need for a higher priority than that given in World War II was discussed. Long-range plans will insure the volume of construction remaining high, the committee believes.

After considerable discussion regarding labor problems, it was concluded that every effort be made to prevent the Department of Labor from establishing wage rates on federal-aid jobs, as has been proposed.

L. to r., Ray Cavendish, West Virginia Road Commissioner; D. H. Bray, Kentucky, new S.A.S.H.O. president; S. T. Roebuck, Mississippi, retiring president.

Long-Range Airport Financing Studied

• N.A.S.A.O.-A.G.C. Group Eyes Effect of Controls, Budget Cut

» FEDERAL controls imposed as part of the war effort and a cut in the budget are contributing to the general confusion obtaining in airport construction, the joint cooperative committee of the National Association of State Aviation Officials and The Associated General Contractors of America learned at its session in Minneapolis last month in conjunction with the N.A.S.A.O. annual convention.

A resolution was passed which called for no reduction in airport work until the importance of air transportation to the military effort is fully evaluated. It further concluded that some types of airport construction might logically be increased instead of curtailed as is expected.

Appointment of a group to study long-range airport construction financing was approved. Contractors reported that their industry was capable of taking on more airport work if the projects could be financed. Passage of S. 2875 extending the federal aid for airports by five years was noted as an achievement in which the joint committee had played a part.

Complaints by states and by some contractors and suppliers of materials about the slow payment of federal assistance were discussed. The committee learned that the Civil Aeronautics Administration is revising its procedure to help solve this difficulty.

The committee recommended that the sponsors of federal-aid airport projects take advantage of the amended procedure. It further recommmended that sponsors provide temporary supplemental financing so as not to rely on the last 10 per cent of the federal grant. The Federal Airport Act does not permit adjustment of protested items under normal public works procedure.

The joint committee recommended that state aviation officials and contractors alike cooperate with the CAA in handling wage rate determinations, and that when inconsistent rates are specified by the Department of Labor, these rates should be promptly and vigorously challenged. The matter of securing accurate wage rates specified on airport construction projects was discussed at length.

Barber-Greene *Photo-News*

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ON-THE-JOB VIEWS AND COST-SAVING IDEAS VOLUME 1—NUMBER 2

OPERATION ASPHALT SETS PAVING RECORD

Baltimore broke all existing street paving records when 14 blocks of arterial streets were paved in one day. Such speed was necessary if costly interruptions and tie-up time were to be held to a minimum. Ten Barber-Greene Finishers placed the required 23,500 sq. yds. of 2 and 3 course hot-mix in 13½ hours . . . to everyone's complete satisfaction. Contractors (7 cooperated), city officials and engineers . . . even the "sidewalk superintendents" . . . agreed that "Operation Asphalt" was a huge success.

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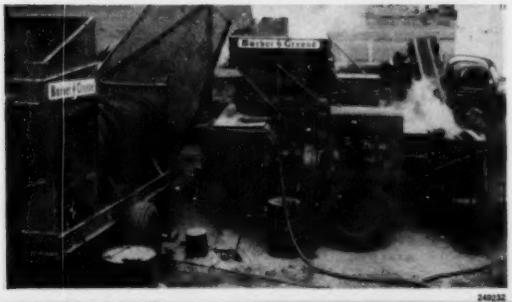
Complete Maintenance Plant in Portable Package 249233



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PAVING PACE FAST IN VERMONT, TOO

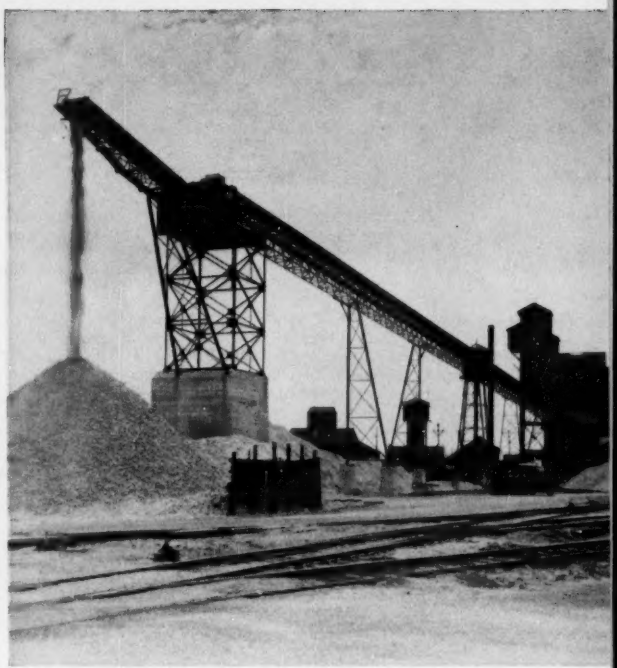
Up here in the northern reaches of the U. S., the Highway Department of Vermont sees to it that this B-G Portable Maintenance Plant really gets around. Ten moves were made in each of the last two seasons. The plant processed as much as 35,000 tons of cold-mix before January snow forced a shutdown. Each of these moves was completed in less than three days, including an average of 75 miles of road travel between set-ups. This quick, economical portability is a big cost-cutting advantage. It enables the state of Vermont to profitably handle a large amount of its own maintenance work on a year-round basis.

Close-up from Dryer end. Note set-up in yard.

Barber-Greene *Photo-News*

CONVEYOR SYSTEM DOUBLES in DOLOMITE

A unique system for handling two different types of products has been built around this B-G Permanent Conveyor by Consumers Co. of McCook, Illinois. Here you see it carrying limestone from the crusher to discharge from a height of 56′ onto a surge pile. Capacity is 600 tons per hour. Tunnel conveyor beneath surge pile carries stone under tracks to dolomite plant. When the second product—limestone for railroad ballast, road and construction work—is being processed, a B-G Tripper spills material from the conveyor into a bucket elevator. The limestone is then carried into the main processing plant. Here is another example of how the effective use of simple, standardized B-G Conveyors minimizes the expense and manpower of high capacity moving of bulk materials. Note how small, under-hung conveyor discharges to clear the supports.



SAVINGS MARKED OFF BY THE ACRE The Hanna Coal Company is now saving an estimated 200 to 400 tons of coal per acre at their Number 12 Mine in Georgetown, Ohio. This is coal that was previously left in the mine, buried under the spoil from previous cuts. But now with the help of this B-G machine, the shovel operator is loading out nearly 100%. The B-G Ditcher, in this operation called a "marking machine," cuts a 5" wide trench to the full depth of the seam, marking a "go-no-farther" line for the shovel, and leaving a vertical wall in place of a saw-tooth edge which formerly trapped coal under spoil. This is another example of sound B-G engineering solving unusual problems economically, simply, with minimum manpower.

BAY CITY BEAUTIFIER

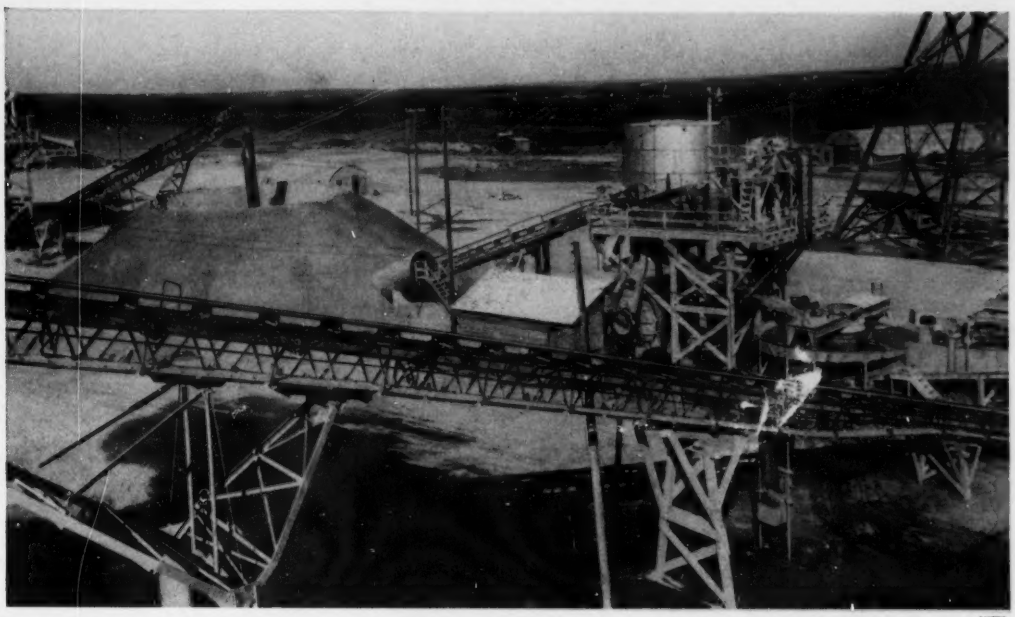
San Francisco has long been noted for its beautiful parks and beaches. Now, to insure that those parks and long stretches of white sand remain the envy of the world, a B-G Crawler-Mounted Bucket Loader performs a multitude of services for the Park Commission. They use it to clear away drifted sand in the dividing strip of seaside, multi-laned highways; stripping loam for use in maintaining or establishing new grass areas; as a loader of debris, sand, etc.; as an excavator for cutting new park paths. The beaches get their beauty treatment at frequent intervals when the B-G Loader patrols the bathing strip, removing glass, stones, paper . . . even an occasional watch or ring.

for full, fast information on any equipment

Barber-Greene *Photo-News*

BELT CONVEYORS AND "COMPATIBILITY"

Skillful use of belt conveyors is simplifying the job of handling aggregate for the $20,000,000 flood control project now being constructed by the Mount Morris Dam builders. Featuring the latest in push-button control, the aggregate plant is geared to produce 5 grades of aggregate from the same stone (for aggregate compatibility) at the rate of 4500 tons per day. This impressive production achievement is made possible largely through the use of 17 belt conveyors that handle all stone and aggregate from raw storage to concrete plant. Typical of the jobs B-G standardized, easy-to-install, conveyors are doing, is the first stock pile belt, a 36" x 198' unit with a capacity of 500 tons per hour. The many B-G pre-engineered conveyors in this system are contributing greatly to the efficient, economical handling of aggregate for the 900,000 cu. yds. of concrete required.



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FOR A TRIM LOAD EVERY TIME

Hydraulically controlled conveyor on this new B-G Loader swivels to trim every load . . . eliminates spillage or partly filled trucks. This flexibility, plus long reach, allows filling longest, highest trucks, trailers—even railroad cars—to full capacity at a 3 yd. per minute clip. Newest in the B-G line, this Loader travels at 15 M.P.H. on its pneumatic-tired chassis. Easily converted to a 7-11 yd. per minute snow loader to give year-round service. New literature—now on the press—illustrates the many features of this newest B-G Heavy-duty Loader.

BIG, RUGGED—AND PORTABLE

In quarries or gravel pits, in the yards of State, County, and Municipal Highway Departments, railroads, mines, mills, in any industry—any place where heavy duty portable conveying service is a "must"—this new B-G Portable Conveyor is right at home. In spite of rugged construction for toughest operation, this conveyor is highly portable. It is equipped with a low mast truck which speeds movement in and around buildings, guards against damage from underpasses while towing. It is THE heavy-duty portable. Send for your copy of new literature.

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on these pages--see your B-G Distributor

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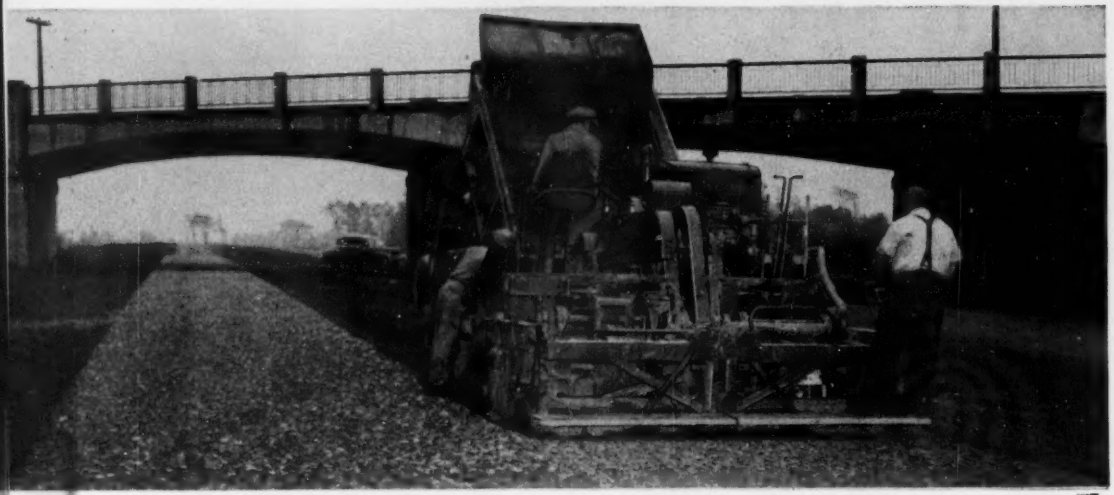

CRUSHED STONE MANTEL FOR THE QUEEN'S WAY

Two B-G Finishers recently completed laying 110,000 tons of stone along the Queen Elizabeth Way between Fort Erie and Niagara Falls, a distance of 18 miles. Often working in tandem, these two green machines spread two courses of raw stone for this penetration macadam in sizes up to 3½". In spite of this tough abrasive material, both Finishers went through the entire job without an hour's delay for repair.

BG

Apartment Reported Largest Southern Commercial Project

- Claiborne Towers to Have 1,036 Units
- Building Will Feature Newest in Equipment

» INSTANCE of a general contracting firm doubling in the role of owner is found in the erection of Claiborne Towers, a $10 million apartment development in the city of New Orleans, which is said to be the largest commercial building in the South. The Shelby Construction Company, Inc., A.G.C., 1411 Brentwood Boulevard, St. Louis, Missouri, is the builder and likewise the owner.

The project will occupy an entire city block bounded by South Claiborne, Canal, Cleveland and South Derbigny streets. Being built on a marshy soil, it has required 1,200 piles 80 feet in length to provide a solid foundation for the massive structure. The site of the Towers was acquired from Tulane University.

Most Modern Equipment

The 17-story building will contain 1,036 apartments, 80 per cent of which will be efficiency units composed of a combination of living-dining room, dressing room, bath and kitchen, and renting at $70 per month. Rental of the remaining 20 per cent will depend on the number of bedrooms. The apartments are unfurnished but equipped with the latest model facilities such as refrigerators, stoves and cabinets.

All 1,036 apartments will have the newest available air-conditioning system during the summer and winter months. The system itself weighs 1,400 tons and it is claimed to be one of the largest and most unique ever to be installed in a commercial development.

Distinctive vertical transportation features will be provided by six Triplex Collective Control elevators installed by the Otis Elevator Company. The control system will assign each call to the car in the best position to answer it promptly, thus preventing other cars from answering the same call. This will eliminate bunching of cars and slowing in service. The lifts may be operated with or without an attendant.

Each car will have a loading capacity of 2,500 pounds and will rise 168 feet at a speed of 350 feet a minute. Wood finish will be used to correspond with the color and design of the general decor. Elevators will be installed in two banks of three each and automatically coordinated to act as teams of three elevators each.

800,000 Square Feet

Shops and specialty stores will be located on the first and second floors. The roof of the building will be utilized for recreational purposes. A 300-car garage will be provided for the convenience of tenants.

Claiborne Towers will have an actual floor space of 800,000 square feet. The façade will be of buff brick and marble. Aluminum window frames will serve both a practical and esthetic purpose since they will remain bright and attractive for many years without painting or cleaning.

The building was designed by Nowland Van Powell and Henry A. Ehrensing. The structural designer was A. W. Thompson. Weil and Moses designed the air-conditioning system. Mechanical design was by Cary B. Gamble and Associates, and electrical engineering by Louis N. Goodman. All these concerns are of New Orleans.

Many Banks Financing

The building will be owned and operated by Claiborne Towers, Inc., officers of which are Paul Kapelow, president; Emile Bluestein and A. N. Korman, vice-presidents, and Lewis Leader, secretary-treasurer. These men hold the same positions in the Shelby Construction Company of St. Louis and New Orleans.

A syndicate headed by the Hibernia National Bank of New Orleans has made a $9,200,000 loan for interim financing. The syndicate is directed by Edward LeBreton, vice president of the Hibernia National. On the completion of the building, the New York Life Insurance Company will make a permanent loan on the structure. This loan has been insured by the Federal Housing Administration.

Other banks aiding in the interim financing are Chase National Bank and Midland Bank and Trust Company, New York; First National Bank, Southern American Insurance Company and Union Planters Bank, Memphis; Harris Trust and Savings Bank, Chicago; Philadelphia National Bank, Philadelphia; American National Bank, Nashville; First National Bank and Mississippi Valley Trust Company, St. Louis; and the First National Bank of Jackson, Mississippi.

Description of NPA's Order M-4 and housing credit controls issued last month will be found on Pages 23-24. Cuts in various federal building programs under general appropriations are listed on Page 25.

N.E.C.A. Hears A.G.C. Views on Contracts

• Harmony Urged between General and Subcontractors

» HARMONY and mutual helpfulness and understanding should characterize the relationship between general contractors and subcontractors, Merle F. Smith, treasurer of the T & S Construction Engineers, Inc., A.G.C., Los Angeles, urged in an address before the 49th annual convention of the National Electrical Contractors Association in the Biltmore Hotel, Los Angeles, on October 20. In a clinic called "As Others See Us," Mr. Smith represented the viewpoint of The Associated General Contractors of America.

In these days of tough competition and the recent organization of many new firms in both categories, it behooves both general contractors and subcontractors to investigate first and establish the reliability of the other, Mr. Smith declared. "A general contractor cannot be a success without dependable subcontractors, and particularly the electrical contractor who can do much to make the job a success or failure," he said.

In bringing up the controversial subject of separate contracts in his remarks, Mr. Smith announced his belief that if both general contractors and subcontractors lived up to their ethical codes, such procedure on separate bids and separate contracts would not be necessary.

He quoted generously from the new A.G.C. booklet, *Undivided Responsibility—Key to Lower Construction Costs.*

Mr. Smith condemned the practice of waiting until the last minute to submit the sub bid. "Give the contractor at least time to enter your bid in his estimate so he can obtain a total, and if the bid is complex or has many alternates, he should have time to analyze it and possibly ask some questions."

He cited an instance in connection with his own firm in which he accepted a last minute verbal bid from an electrical contractor on a multimillion-dollar job. The proposal was so good that the T & S bid was cut to include it rather than that of the bidder originally chosen. Mr. Smith's firm was low on the job and secured the contract, only to learn that the successful subcontractor had failed to include the fixtures which were clearly specified. He raised his bid and the general contractor relinquished the contract to the second bidder.

The California contractor asserted that his firm made it a strict policy of using only responsible subcontractors. "Recently I bid 17 jobs in a row and was either second or third on all of them. If I had used my low subbids, I might have been low in most cases, but we don't do business that way."

The speaker also believed it was detrimental to the best interests of all for a subcontractor to attempt to learn the amounts of other bids, take advantage of "leaks" in contractors' offices, and attempt to secure advance information from the general contractor.

"When a 'sub' calls me and gives me a price of say, $10,000 on a piece of work and then asks me how the price looks, I always answer, 'It looks like $10,000 to me.' That usually shuts him up."

Other participants in the clinic included the electrical manufacturer and utility.

Specialty Group Approaches Government

• Criticizes Last War Policies, Seeks New Procedures

» THE SPECIALTY Mechanical Contracting Industries representing the electrical, plumbing and heating, piping and air-conditioning associations, in a memorandum to government officials and agencies, criticizes four policies employed in World War II and offers five recommendations for the current emergency.

The S.M.C.I. includes the following under "past mistakes":

1. The policy of letting much of the construction on a cost-plus-fixed-fee basis;

2. The policy of dealing with large, integrated companies to the exclusion of the existing and ready established specialty contracting organizations;

3. The policy of disregarding experience-tested industry methods of job management; and

4. The issuance to contractors of priorities by class of material without regard to how this might affect the completion of the job.

The recommendations are largely to correct the objectionable procedures cited in the list of "past mistakes":

1. "Contracts for all construction and modernization projects be let on a lump sum basis . . .";

2. "Full use of existing specialty contracting organizations . . .";

3. "The job management functions and experience-tested industry practices be given full play . . .";

4. "The specialty contracting industries be given, in any priority or allocation program, preference ratings for the job and not by individual classes of material . . ."; and

5. "Awarding authorities take such practical steps as prequalification of bidders and separate contract procedure for the mechanical contracting work so as to encourage a wider participation in the completion by competent specialty mechanical contractors. This would permit the awarding of specialty mechanical work to organizations of experience and proven capabilities. Such specialty mechanical contracts may be included under the general contract if desired."

Standards Session Planned

The contractor's point of view will be discussed by E. K. Abberley, project executive and director, Turner Construction Company, A.G.C., in a session on "How Standards Benefit the Construction Industry" at the National Standardization Conference in New York, November 27-29. This conference is held in conjunction with the 32nd annual meeting of the American Standards Association, and is sponsored by the Producers Council, the American Institute of Architects, and The Associated General Contractors of America.

The conference will be held at 10 a.m. Wednesday, November 29 in the Waldorf-Astoria Hotel, with Norman P. Mason, chairman of the Construction and Civic Development Department of the U.S. Chamber of Commerce, presiding. The part standards play in cutting costs and speeding deliveries will be outlined from the viewpoints of the contractor, the architect, and the materials producer.

Lessing W. Williams, New York architect, will present the architect's views and Harry C. Plummer, director of engineering and research, Structural Clay Products Institute, will speak for the materials producer.

HUGE STEEL-ARCH HANGARS go up fast!

▲ Principal roof members are curved, riveted plate girders. Pinned at supports and crown, they have a constant depth, back to back of flange angles of 5 ft. 7 in. and rise 49 ft. 11 in. to provide a clear height at center of 75 ft.

◀ Interconnected by 2-story steel frame lean-tos ranging in width from 39 to 103 ft., the hangars form a building 1,148 ft. long and 219 ft. wide. Each hangar provides a 300 ft. clear floor space.

302′ Steel-Arch Spans SIMPLIFY ERECTION . . .

PROVE MOST ECONOMICAL TYPE OF CONSTRUCTION

PROJECT: Three hangars and interconnecting lean-tos at New York International Airport, Queens, New York City.

DESIGNED BY: Port of New York Authority, Roberts and Schaefer Company, Consulting Engineers. Lorimer and Rose, Associate Architects.

GENERAL CONTRACTOR: Stock Construction Corporation.

STRUCTURAL STEEL: 3,600 Tons. Fabricated and erected by American Bridge Company.

Erected in 13 months (complete with heating, fire-alarm and lighting systems) the three giant, 300′-wide, 219′-long hangars with interconnecting 2-story lean-tos have set a record for this type of construction—both as to length of spans and speed of construction.

Erected in four sections, the 302′-steel arches are pinned at the supports and crown to provide a clear height at the center of 75 ft. Each hangar is large enough to accommodate 6 Douglas DC-6 transports or four double-deck Boeing Stratocruisers. In addition, parking aprons on both sides of the building can take 15 aircraft of the type having a turning circle of 175 ft., or 19 of the smaller type having a turning circle of 150 ft.

The decision to use long panels between solid web steel arches for this important project was made after studied consideration of other types of construction materials. And again steel proved most economical by meeting all comers in competitive bids.

If you'd like to know more about the advantages of American Bridge Company *fabricated* and *erected* steel construction, just call our nearest office.

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Texas Court Favors Contractor in Property Obstruction Suit

• Ruling Should Eliminate Many Nuisance Cases

By John C. Hayes

Hayes and Hayes, Washington, D. C.

» A CONTRACTOR acting under a permit by the City of Dallas has the right to erect reasonable street and sidewalk obstructions. This principle was set forth by the Supreme Court of Texas on October 10, 1950, in a far-reaching decision involving damages for loss of profits due to obstruction of adjacent property. The court decided that the operators of a night club were not entitled to damages from the contractor.

Dallas Chapter Acts

The Dallas Chapter, A.G.C., because of the importance of the case to the building contractors throughout the state, retained legal counsel to prepare and file an *amicus curiae* brief with the Supreme Court in its behalf.

This case was first heard by the District Court of Texas sittting in Dallas. The jury brought in a judgment in the sum of $4,200 against the owner and the contractor. In brief, the facts disclose that the plaintiffs operated a night club, known as the Little Stork Club, at 1715 Commerce Street in the City of Dallas. In the fall of 1947 the owner contracted with the Henger Construction Company, A.G.C., for the erection of a 15-story office building on the premises situated from 1709 to 1713 Commerce Street. The undisputed evidence established that the sidewalk area on the Commerce Street side was barricaded, beginning December 1, 1947, by a solid fence approximately eight feet high, and that a low fence, approximately four feet high, extended out into the street area for approximately seven feet; that from the hours of 8:30 a.m. to 4:00 p.m. on Monday through Friday of each week a portable barricade was located outside the fence in the street area, extending to within three feet of the nearest streetcar rail. It was likewise undisputed that pedestrians could cross Commerce Street at a safety walk-way in the middle of the block and could get to the side of Commerce Street on which plaintiffs' place of business was located at a point directly in front of the plaintiffs' place of business.

The defendants secured from the Building Inspector of the City of Dallas a permit for the erection of the building. Permission was also granted to the defendants to erect and maintain certain barricades across the sidewalk and into Commerce Street during the construction of the proposed building. The Charter of the City of Dallas provides that the governing body of the city has the power to grant any owner of property abutting upon streets or other property of the city the use thereof, or to go over or under the same in any manner which may be necessary or proper to the enjoyment of said abutting property by the owner; provided, that such use shall not be inconsistent with or does not unreasonably impair the public use to which said street or other public property may be dedicated.

Court of Appeals

The defendants appealed from the findings in the District Court to the Court of Civil Appeals, where the judgment of the lower court was affirmed. The Court of Civil Appeals, in its decision affirming the lower court, held that under the Constitution of the State of Texas no person's property could be taken, damaged, or destroyed, or applied to a public use, without adequate compensation being made, unless by the consent of such person; that if the structure erected and maintained by the defendants did in fact unreasonably impair the public use to which such street was dedicated, then in that event the plaintiffs would have been entitled, had they seen fit to do so, to have such structures removed and abated as a nuisance.

It also held that the intentional erection and maintenance of such structures by the defendants constituted an injurious invasion of the plaintiffs' rights of property, even though the obstruction created thereby was not unreasonable under all the surrounding circumstances and was legally permissive under the authority granted by the City of Dallas.

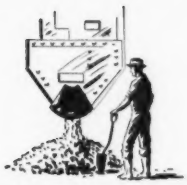
The decision of this court constituted a grave threat to the owners and building contractors in the entire State of Texas. It opened the door for the filing of a multitude of nuisance law suits against both the owner and the contractor.

The Supreme Court of Texas granted the defendants' request for review of the lower court's decision. At this point in the proceedings, the Dallas Chapter retained legal counsel to safeguard the interests of the building contractors. The chapter's attorneys asked leave to appear before the Supreme Court as *amicus curiae,* because of the confusion resulting from the Court of Civil Appeals decision.

Amicus Curiae Brief

The *amicus curiae* brief advised the court that owners and contractors were concerned because under the lower court's opinion a contractor operating under a permit granted by the governing body of a city to erect necessary obstructions in the city streets became an insurer of adjacent property owners, so that, regardless of the reasonableness of the obstructions, or the care exercised by the contractor, or the necessity of occupying the sidewalks or streets, the contractor and the owner were liable for any decline in profits caused the adjacent property owners.

The Supreme Court's decision overrules the Court of Civil Appeals and sustains the chapter attorneys' contentions. The decision of the court is concise and sets forth a clear-cut statement of the legal principles involved. It should effectively eliminate a multitude of nuisance law suits. This decision follows other state Supreme Court decisions that have consistently ruled that valid legislative or municipal authority protects not only the city but also all other persons acting under and within this authority. A temporary obstruction of a street or highway, when it appears that the act was done with the consent of the proper public authorities and in the course of construction of a building or other work, is not a nuisance. To recover in cases of this type, the burden is upon the plaintiff to show that a particular obstruction was unreasonable. The courts have likewise held that a plaintiff can recover damages to its business in the nature of lost profits only under exceptional circumstances.



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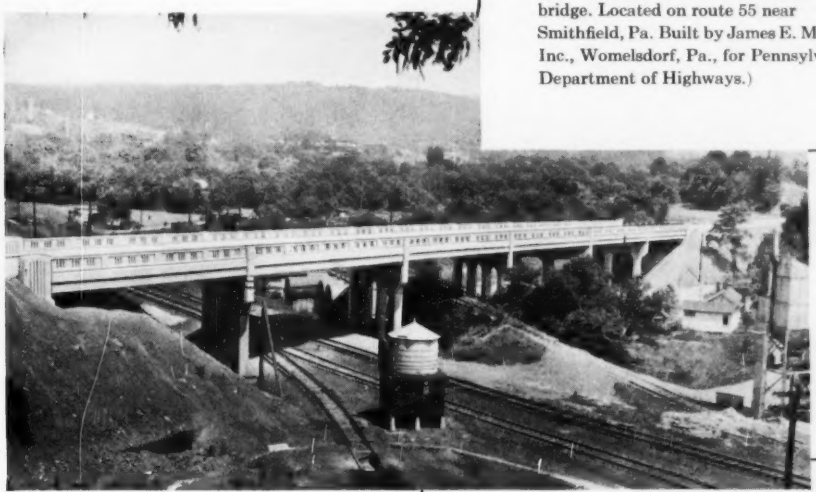

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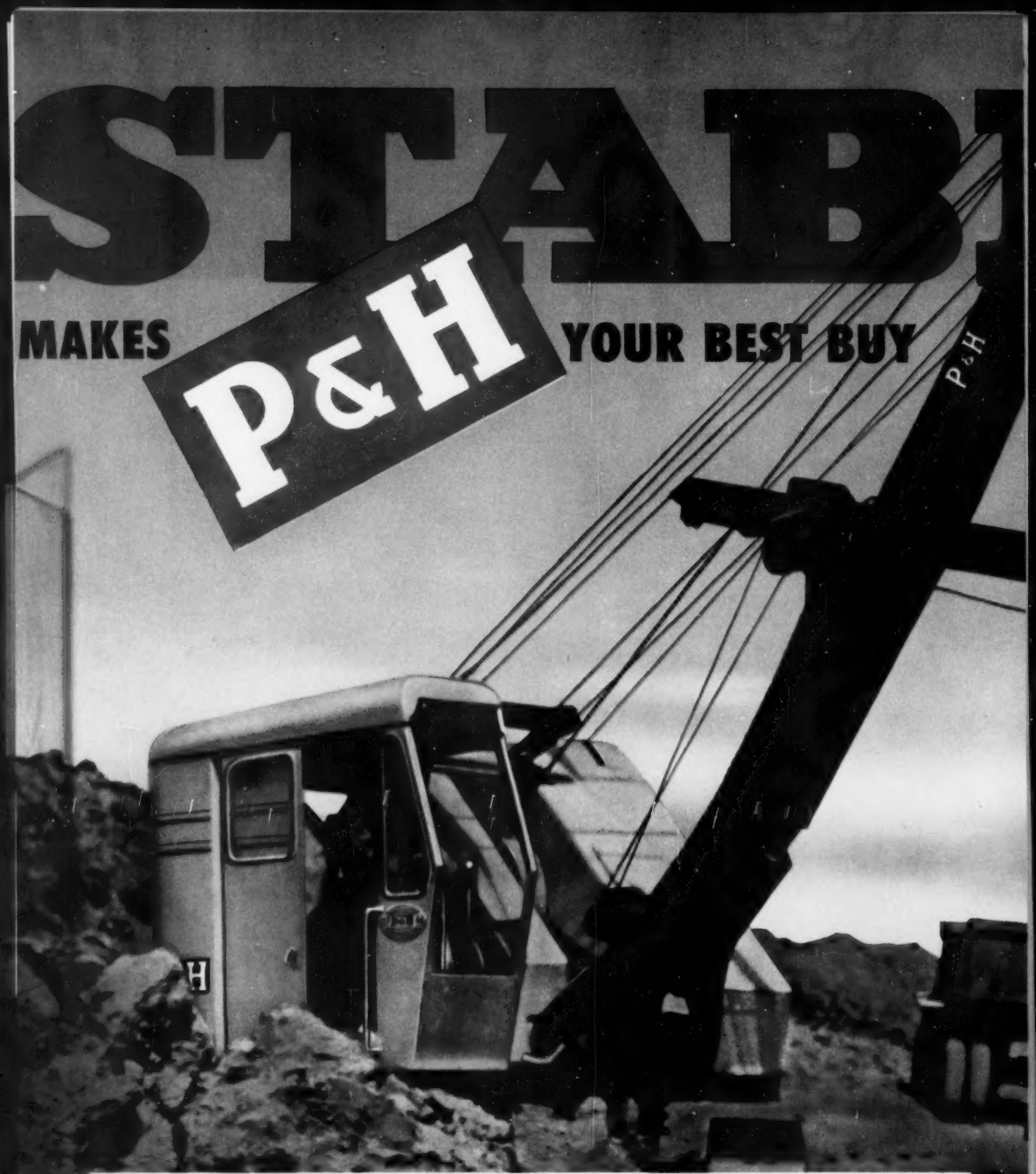

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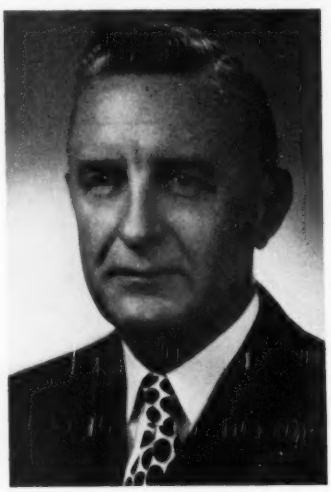
SHOVEL DRAGLINE BACKFILLER CRAWLER CRANE MAGNET CRANE TRENCH HOE PILE DRIVER TRUCK CRANE

Gayle Armstrong's Sudden Death Blow to Association and Nation

• Vice Presidential Nominee Heart Attack Victim

» GAYLE Geard Armstrong, who had been nominated by the Governing Board to be vice president of The Associated General Contractors of America in 1951, died of a heart attack in Roswell, New Mexico, on October 15.



Gayle G. Armstrong

The funeral services on October 18 were attended by more than 1,000 of his friends from various parts of the country. Representatives of the national and New Mexico and Texas A.G.C. were honorary pallbearers.

Mr. Armstrong had a distinguished career in general contracting, and in the civic and business life of the Southwest. In notifying members of the A.G.C. of his death, Managing Director H. E. Foreman wrote:

"It is with a deep sense of regret that the association notes the loss of a man respected and admired by so many. His passing means the loss not only of a loyal, brilliant and talented leader to the association and all other endeavors with which he was associated, but also the loss to the country at large of an outstanding citizen."

He was born in Roswell on June 15, 1900, the son of the late Geard B. Armstrong and Mrs. Armstrong. He was educated at Roswell High School, Peddie Institute at Hightstown, N. J., Washington and Lee University and New Mexico Military Institute.

His first contact with the construction industry came in 1922 when he joined the firm of Armstrong & Armstrong, which had been founded by his father. The firm has specialized in highway construction in the Southwest. In 1928 he became a partner and manager of the firm's construction operations. In 1937 he became manager of all operations.

Outstanding projects with which he was connected during World War II included Fort Wingate Ordnance Depot, Hobbs and Fort Sumner Airports.

In other business interests, Mr. Armstrong was president of the Armstrong Construction Co., Roswell; vice president of the Tri-State Paving Co., Albuquerque; vice president of the Oden Motor Co., Albuquerque; treasurer of the Foundation Investment Co., Roswell and Carlsbad; director of the Southwestern Public Service Co., Dallas, Texas; and director of the Mountain States Mutual Casualty Co., Albuquerque. His latest business interests had extended to oil and pipelines.

Ranching, Farming Interests

Ranching and farming were included among Mr. Armstrong's activities. He owned ranch properties in the Roswell and Carlsbad areas. Through these he had become president of the New Mexico Pecos Valley Farmers' Association; a member of the executive committee of both the New Mexico Cattle Growers Association and New Mexico Sheep Growers Association; member of the Agricultural Committee of the Chamber of Commerce of the United States, and the National Cotton Council.

Mr. Armstrong had a keen interest in public affairs, and had been a frequent adviser to Senator Clinton P. Anderson, of New Mexico. During World War II, he was a special assistant to the Secretary of Agriculture; deputy administrator of the Production and Marketing Administration; vice president of the Commodity Credit Corporation; and was government operator of the strike-bound meat packing plants in 1946.

In A.G.C. activities, Mr. Armstrong had been an active member of the Associated Contractors of New Mexico and of the Texas Highway Branch. He had been chairman of the national A.G.C. Highway Contractors' Division, and was chairman of the Public Relations Committee, and a member of the Executive Committee.

Civil Defense Planner

He was nominated for vice president in 1951 by the Mid-Year Meeting of the Governing and Advisory Boards which concluded in Chattanooga, Tennessee on September 13. At the time of that meeting he suffered an attack of an undetermined nature. His last visit to national headquarters in Washington had been on October 10 as a member of the Committee on Civil Defense which met with government officals to help plan the participation of the construction industry in civil defense plans.

President Walter L. Couse led a delegation of A.G.C. representatives who attended the funeral which included Vice President G. W. Maxon; Fred I. Rowe, John MacLeod, D. A. Harmon of the Executive Committee; Past President Warren S. Bellows; Managing Director H. E. Foreman; M. J. Wylie, president, and many members of the Associated Contractors of New Mexico; and men from other states including J. A. Thompson, Morris E. DeWitt, W. A. Smith, C. H. Newell and E. W. Devalon.

Survivors include his widow, the former Miss Murphy Shannon whom he married in 1919; his mother; a son, Billie Bert, who recently became associated with the business; a daughter, Gayle; two brothers, G. B. and Jack; and a sister, Mrs. Camilo Wenzell.

A resolution adopted by the A.G.C. Texas Highway Branch on October 16 stated that Mr. Armstrong typified "the highest ideals of our nation as a gentleman, a professional engineer, a builder, and as a patriotic American who in time of greatest need gave unstintingly of his time, his leadership, and his faithful service to his country."

Mr. Armstrong's death created a situation without precedent in A.G.C. history. President Couse has written all members of the Governing Board asking them to submit to the same nominating committee which acted in September another nomination for vice president in 1951.

THE GRADER THAT'S IN A CLASS BY ITSELF

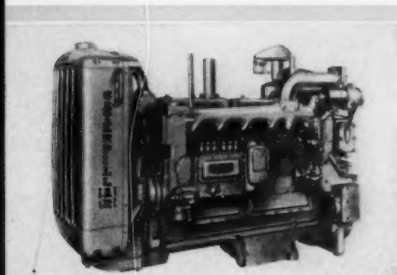
Exclusive bonus features, found only on "Cat" Diesel Motor Graders, make these balanced machines the best you can put on your payroll.

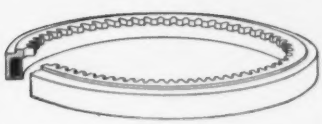
Of his "Cat" No. 12 Motor Grader, which moved more than 30,000 cubic yards of earth during the construction of the Contra Costa County Airport near Concord, Calif., owner Eugene G. Alves says: "I've operated 'Cat' equipment all my life. As far as I'm concerned, nothing can touch it; it's tops in equipment!" And Mr. Alves backs up his opinion by standardizing 100% with "Caterpillar" tools.

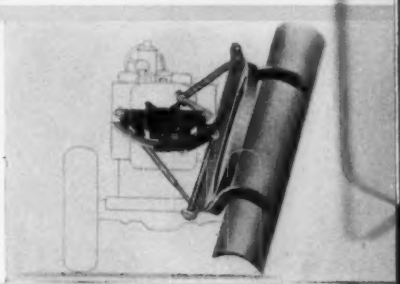
On the Contra Costa Airport job, the "Cat" No. 12 Grader has built roads, done grading and drainage structures, and constructed parking areas. With its engine, clutch, transmission, final drive and blade mechanism all *designed* and *built* by "Caterpillar," the machine has the balance and under-the-hide stamina to keep going the way you *hoped* it would when you bid on a job.

When a motor grader operator doesn't have a chance to stand around with his hands in his jeans looking for work, you know he's handling "Cat" equipment. Ask your "Caterpillar" dealer to *show* you his Motor Grader's exclusives.

CATERPILLAR TRACTOR CO. • PEORIA, ILLINOIS







1 Only "Cat" Graders have "Cat" Diesel Engines for continuous service and economy of operation. These balanced tools *deliver*.

2 Only "Cat" Graders have a box-section blade supporting circle, made from a special angle produced on a "Caterpillar"-owned roll.

3 Only "Cat" Graders have the long radius curved side shift rack that provides extra lateral shift to the blade assembly, together with the required vertical movement.

4 Only with "Caterpillar" equipment do you buy-in on the world-wide "Caterpillar" dealer service—adequate parts inventory and factory-trained servicemen.

CATERPILLAR®

DIESEL ENGINES • TRACTORS

MOTOR GRADERS • EARTHMOVING EQUIPMENT

CUSTOMERS'

INTERNATIONAL

CHOICE

The International TD-24 "Champion of Crawlers"

More than 100 International TD-24 diesel crawler tractors have already been delivered to customers by a single International Industrial Power Distributor. Similar strong demand for this new "Champion of Crawlers" all over the country—proves that the TD-24 is customer's choice—every time!

You earthmoving men who have chosen the TD-24 to increase your payload production have given the TD-24 its present place of prominence in the industry. You've proved, on your jobs, that there is nothing like the TD-24 for power and performance. You've found that this "Champion" pays for itself quickly, and then gives you *extra earnings* for the rest of its rugged working life.

We are proud of this tractor—the TD-24—and of the acceptance you have given it. And we're proud of the superb distributor organization which has brought this mighty crawler to you—coast to coast.

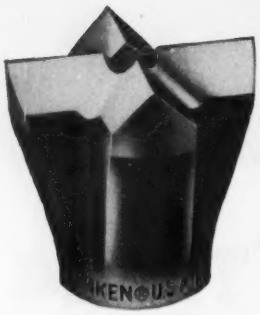
As more International distributors deliver their 100th TD-24 in the months ahead, hundreds more of you who need them will gain the benefits which the great work-capacity and payload production of this "Champion of Crawlers" provides.

INTERNATIONAL HARVESTER COMPANY

INTERNATIONAL HARVESTER

CHICAGO 1, ILLINOIS

INDUSTRIAL POWER

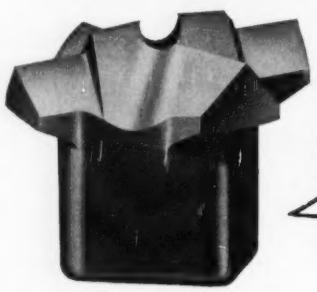


1. MULTI-USE

TIMKEN® ALONE...

2. CARBIDE INSERT

GIVES YOU ALL 3 ROCK BIT TYPES...



3. ONE-USE "SPIRALOCK"

AND A COMPLETE ROCK BIT ENGINEERING SERVICE!

WHAT are *you* looking for in a rock bit? Lowest bit cost? Lowest cost per foot of hole? Greatest possible drilling speed? Some other advantage?

Whatever you want, you're *sure* of getting it from Timken®—for two reasons. First, Timken Rock Bit Engineering Service has *all three* types of bits to select from!

1. MULTI-USE—gives lowest cost per foot of hole when full increment of drill steel can be drilled and when control and reconditioning of bits are correct.

2. CARBIDE INSERT—for extremely hard and abrasive ground. Drillers spend less time changing bits.

3. ONE-USE "SPIRALOCK"—for use where reconditioning is impractical or undesirable. Lowest unit cost. Has revolutionary new "Spiralock" union.

Second, Timken Rock Bit Engineering Service is the world's largest field organization devoted exclusively to rock bit problems—and is backed by years of experience and leading research.

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TRADE-MARK REG. U. S. PAT. OFF.

your best bet for the best bit . . . for every job

FREE BOOKLET! Required reading for all rock bit buyers. Shows full line of bits with detailed descriptions. Write The Timken Roller Bearing Company, Rock Bit Division, Canton 6, Ohio. Cable address: "TIMROSCO".

Pre-Election Lull Prevailing in Government Labor Moves

• Some Stabilization, Manpower Appointments Made

» DURING OCTOBER there was a pre-election lull in the field of government labor relations actions.

Statements by government officials were to the effect that indirect controls over the economy such as credit restrictions, priorities, allocations and higher taxes should be tried before resorting to sweeping controls over wages and prices.

A few appointments were being made to agencies and boards which would act in the fields of wage stabilization and manpower utilization, but the organizations had not been completed and their programs had not been established.

The campaigns of Senator Taft and others whom labor organizations had singled out as special targets were being watched for their bearing on future Congressional and executive action with respect to labor legislation.

The policy of "wait and see" was voiced October 23 by W. Stuart Symington, chairman of the National Security Resources Board, the government's mobilization director, in his first press conference since assuming the post last spring, who also stated:

"It would be dangerous to put sweeping controls over the American economy without first trying higher taxes and credit curbs. If everyone gets in and pitches, we have a good chance to make indirect controls work."

Economic Stabilization

Under authority of the Defense Production Act of 1950, the President in September created the Economic Stabilization Agency, to have general charge of the government's wage and price control programs.

Dr. Alan Valentine, former president of the University of Rochester, New York, was sworn in as Administrator on October 17, and is now in the process of assembling a staff and information. When sworn in he stated that he hoped higher taxes, industrial expansion and credit controls would make wage and price controls unnecessary, except as a last resort.

As a part of the Economic Stabilization Agency there has been created the office of Director of Price Stabilization. By press time no appointment had been made to this office.

Another part of the ESA is the Wage Stabilization Board, whose function would be somewhat similar to that of the National War Labor Board of World War II. Cyrus S. Ching has been persuaded to take a temporary leave of absence as head of the Federal Mediation and Conciliation Service to be chairman of the tripartite board. Appointments are yet to be made of the two other public members of the board, and of the three industry, and three labor members.

Mr. Ching was in charge of labor relations for the U. S. Rubber Co. During World War II he was a public member of the NWLB. The Defense Production Act encourages voluntary action by labor and industry before wage controls are imposed, and it is possible that a labor-management conference may be called by the government before any direct controls are issued.

It is possible that after the Wage Stabilization Board has been appointed, a subsidiary board will be appointed to act for the construction industry similar to the board which acted during World War II.

Cyrus Ching

In September, Secretary of Labor Tobin established the Office of Defense Manpower, which will coordinate the defense manpower activities of the Department of Labor. On October 22, Robert C. Goodwin, Director of the Bureau of Employment Service, was appointed executive director of the new office. Mr. Goodwin, 44, was executive director of the War Manpower Commission late in World War II.

NLRB Announces Taft-Hartley Policies

• New Counsel George Bott Agrees with Board Standards

» THE NATIONAL Labor Relations Board on October 6 announced the establishment of standards which will govern its exercise of jurisdiction under the Taft-Hartley Act.

George Bott

In general, it will take jurisdiction only over cases having a "pronounced impact upon the flow of interstate commerce." The standards were not specifically established for the construction industry, and a clarification is being sought of how the standards will apply to construction.

NLRB General Counsel George J. Bott, who was appointed in September to succeed Robert N. Denham, has stated that he is in general agreement with the board's standards.

The standards, based on eight recent unanimous decisions, mean that the board will exercise jurisdiction over:

"1. Instrumentalities and channels of interstate and foreign commerce (for example, radio systems);

"2. Public utility and transit systems;

"3. Establishments which operate as integral parts of a multi-state enterprise (for example, chain stores, and branch divisions of national or interstate organizations);

"4. Enterprises which produce or handle goods destined for out-of-state shipment, or performing services outside a state, if the goods or services are valued at $25,000 a year;

"5. Enterprises which furnish services or materials necessary to the operation of enterprises falling into categories 1, 2 and 4 above, provided such services or goods are valued at $50,000 a year;

"6. Any enterprise which has:

(a) a direct inflow of material valued at $500,000 a year; or

(b) an indirect inflow of material valued at $1,000,000 a year; or

(c) a combination of inflow or outflow of goods which add up to at least a total of 100% of the amounts required in items 4, 5, 6 (a) and (b) above;

"7. Establishments substantially affecting national defense."

Recent Labor Cases Affecting Construction

As Reported by A.G.C. Labor Relations Staff

NLRB Rules Strike Against One Member of an Association Does Not Justify Layoffs by Other Association Members. In a 4 to 1 decision with Reynolds dissenting, the National Labor Relations Board recently ruled that members of an employers' association violated the Taft-Hartley Act by discharging their employees because the union called a strike at the plant of one of the association members while negotiations were being conducted by the association and the union. The NLRB said that it was not improper for the union to attempt to bargain with one member of the association, even though for eight years it had bargained with the association.

The Board reasoned that in this case the association and the union had reached a deadlock and the only alternative was for the union to attempt to come to terms with the members of the association individually. Member Reynolds points out that it is as wrong for the union to try to circumvent the association as the agent of the employers as it would be for the employer to try to go around the union and bargain individually with his employees who are members of the union.

The majority of the Board was of the opinion that the designation by the employer of the association as its agent for *association bargaining* did not mean that it had appointed the association its agent for *separate bargaining* with the union.

While the case does not involve the construction industry, many of its features apply generally to all industries. Full details of the case were reported in a recent Labor Service Bulletin which was received by all A.G.C. chapter secretaries and managers. (Reference: *Morand Brothers Beverage Company Case*—91 NLRB No. 58—September 28, 1950.)

NLRB Rules on Jurisdictional Dispute between Electricians and the Laborers. In a unanimous decision issued on October 4, 1950, the NLRB ordered the Hod Carriers' Union to cease forcing the Middle States Telephone Company of Illinois to assign the work of laying conduits to members of its union rather than to employees of the company who are members of the International Brotherhood of Electrical Workers. The Board did not take the position that the work of laying conduits belonged to the electricians as opposed to the laborers' union; however, it simply reiterated its policy as stated in the machinist-millwright dispute at Redondo Beach, California, wherein it ruled that one union cannot "force or require any employer to assign particular work to employees in a particular labor organization or in a particular trade, craft, or class rather than to employees in another labor organization or in another trade, craft, or class, unless such employer is failing to conform to an order of certification of the Board determining the bargaining representative for employees performing such work. . . ." [Section 8 (b)(4)(D) of the Taft-Hartley Act.] (June CONSTRUCTOR, p. 24.) (Reference: *Middle States Telephone Company of Illinois Case*—91 NLRB No. 99—October 4, 1950.)

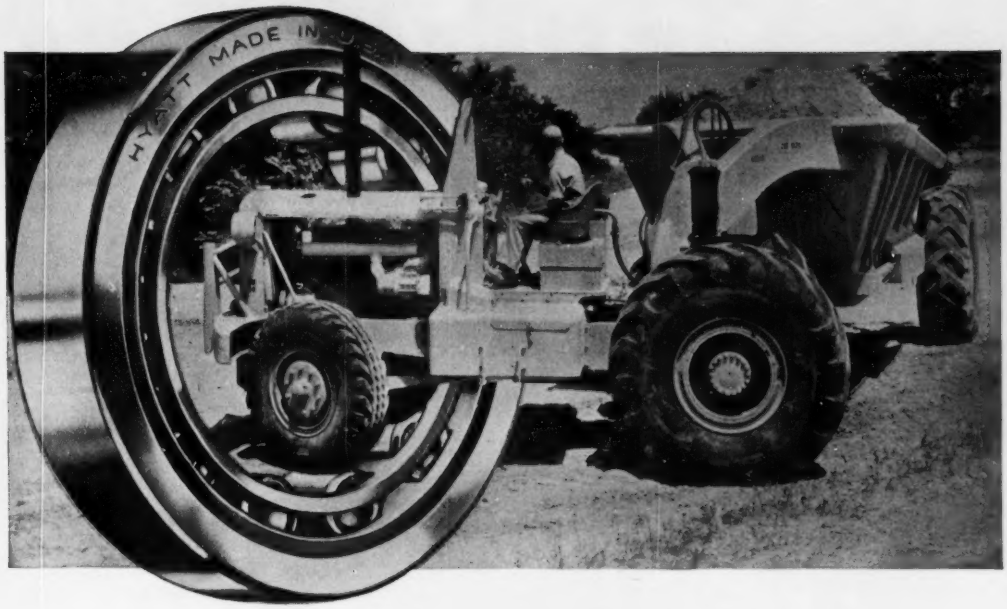
NLRB Rules That Taft-Hartley Ban on Jurisdictional Dispute also Applies to Disputes between a Union and the Non-Union Employees to Whom the Employer Has Assigned Work. By a 3 to 2 decision the NLRB held on October 19 that the provisions of the Taft-Hartley Act forbidding jurisdictional disputes also apply to situations where a particular union is seeking to force the employer to assign certain work to it rather than to his employees who are not members of the union. Here the Ironworkers objected to the use of non-union employees for the setting of certain machinery and in furtherance of their protest placed a picket line on the premises of the owner. Several trades employed by a general contractor on the same project refused to cross the Ironworkers' picket line. The majority opinion of the Board held that Section 8 (b)(4)(D) applies to assignments to a class of employees as well as to a particular union.

The Board held:

"On the record before us, it is clear that the dispute in this proceeding involves the joint effort by the Respondent labor organizations to force or require the Company to assign machinery installation work to members of the Iron Workers, although the work was being performed by the Company's employees who were not represented by any union. The only distinction between this case and the Stroh case, recently decided, appears to be that in the present case the employees whom the Respondents sought to displace with their own members are not organized, whereas in the Stroh case, the employees sought to be displaced were represented by the International Association of Machinists. However this distinction does not affect the applicability of Section 8 (b)(4)(D) as finally enacted. If any ambiguity exists in the words 'trade, craft or class' which were added to the original version of the Senate bill, S. 1126, such ambiguity is completely removed for us by Senator Taft's explanation of the section prior to the present Act's passage to the effect that 'this subsection applies not only to strikes over the assignment of work to one particular union rather than another, but also to the assignment of work to one union rather than another group of employees.'" (Reference: *New London Mills, Inc.*—91 NLRB No. 86—October 19, 1950.)

U. S. Appellate Courts Disagree on Secondary Boycott in Construction. In a recent decision by the U. S. Court of Appeals, District of Columbia, it was held that a strike by certain unions to force a general contractor to cease permitting non-union employees of subcontractors to work on the same construction project was not in violation of the Taft-Hartley Act, since the relationship between a general contractor and subcontractor "arising out of the awarding of a subcontract would not, within the meaning of the Act, be 'doing business' as between the parties." The court said that the general contractor was not a *neutral* party and therefore the strike against the presence of non-union men on the job was primary and not secondary. (Reference: *Denver Building and Construction Trades Council, IBEW, AFL, Local 68, et al, Petitioners, v. NLRB, Respondent.* Sept. 1, 1950. 18 Labor Cases 65,-949.)

The Supreme Court of the United States will pass upon this question during the present term of the court because the Second Circuit Court of Appeals (New York) has decided a case directly contrary to the decision in the Denver Building and Construction Trades Council Case.



HYATT and CATERPILLAR
Partners in Performance

THE new "CAT" DW20, latest of Caterpillar Tractor Co.'s wheel tractors, is the result of five years of intensive research, design engineering and job-proved application.

One of the outstanding features that provides dependability and easier operation of this new tractor is the application of Hyatt Roller Bearings. Proved through the years on all types of "Caterpillar" products, Hyatts make the turning of wheels, gears and shafts easier—reduce wear and care—perform smoothly under the toughest conditions and come back the next day ready for more.

• • •

With Hyatts in the vital positions, Caterpillar, like so many equipment builders, helps build performance into the equipment they make. Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.

HYATT ROLLER BEARINGS

MORE-MORE-MORE

TYPICAL of dozens of installations, this Model 5050 Cedarapids Double Impeller Impact Breaker is producing tops in tonnage—and at lower cost. In a dolomite installation in Ohio, one operator claimed 720 tons per hour using two 150 H.P. Motors. In Florida, one Cedarapids Breaker is doing the work of three previous crushers in reducing a very abrasive coral rock down to minus 1". Ask your Cedarapids distributor for more field-proved facts on Double Impeller Impact Breaker action.

THE IOWA LINE *of Material Handling Equipment Includes:*

ROCK AND GRAVEL CRUSHERS • BELT CONVEYORS • STEEL BINS • BUCKET ELEVATORS • VIBRATOR AND REVOLVING SCREENS • UNITIZED ROCK AND GRAVEL PLANTS • FEEDERS • TRAPS • PORTABLE POWER CONVEYORS • PORTABLE STONE AND GRAVEL PLANTS • REDUCTION CRUSHERS • BATCH TYPE AND VOLUMETRIC TYPE ASPHALT PLANTS • HAMMERMILLS • DRAG SCRAPER TANKS • WASHING PLANTS • SOIL COMPACTION UNITS • STEEL TRUCKS AND TRAILERS • KUBIT IMPACT BREAKERS • DOUBLE IMPELLER IMPACT BREAKERS

PRODUCTION

of Ideal Cubical Shaped Aggregate

with Cedarapids

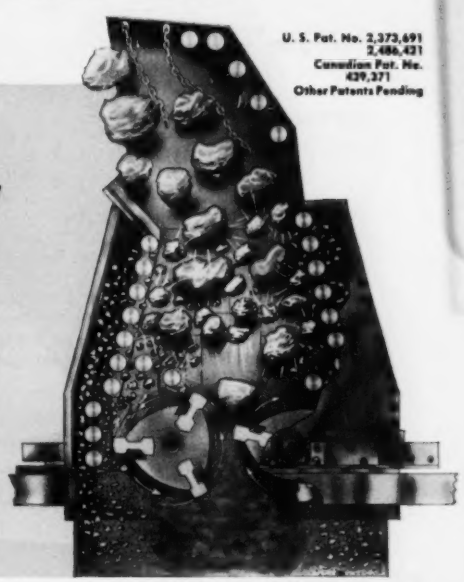
DOUBLE IMPELLER IMPACT BREAKER

(formerly made by New Holland)

HERE'S the unit that will give you greater hourly tonnage capacities, better quality and shape of finished products, lower horsepower per ton of aggregate produced and a higher reduction ratio.

The Cedarapids Model 5050 Double Impeller Impact Breaker can produce up to 400 tons per hour of minus 4" clean, cubical aggregate required in so many specifications today. The smaller models—4040, 3030 and 2020 can deliver from 75 tons per hour—up, depending on the material fed, horsepower used and size product desired.

You can use the Cedarapids Double Impeller Impact Breakers for basalt, cinders, tuff, perlite, limestone, coral rock, sandstone, coal, copper ore, lead zinc ore, low grade iron ore, or dozens of other materials with a relatively low silica content. They will operate in wet, sticky material that jams, packs or clogs conventional machines.



U. S. Pat. No. 2,373,691
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Set up your plants NOW— for stepped up capacity

PUT *your* plant in the big money picture with the high capacity production made possible by the Cedarapids Double Impeller Impact Breaker. Think of the profit in producing greater hourly tonnage of a better product . . . and at the same time reducing your power and maintenance costs, with a lower plant investment! The illustration at the right shows how it is done . . .

Rock is broken by impact (not crushed) into the ideal cubical aggregate required in so many specifications. And a high percentage of the material is *broken in mid-air* by rock striking rock! Result . . . the Breaker can be fed larger rocks, handles greater volume, reduces pit run material to specification size *in one pass.* This extremely high ratio of reduction reduces your plant investment because it eliminates the need for much accessory equipment such as screens, conveyors, secondary crushers, etc.

Stone broken in mid-air requires no power . . . you save on horsepower. Approximately 50% less contact of stone on metal keeps replacement and maintenance costs low.

Get this big volume, low cost set-up operating in your plant now!

IOWA MANUFACTURING COMPANY

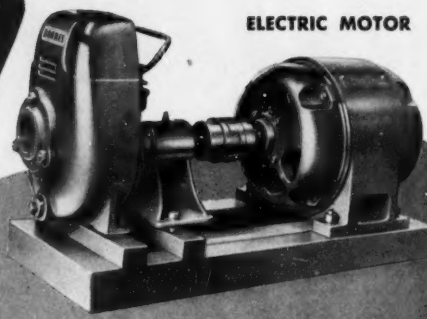
Cedarapids

Built by IOWA

Cedar Rapids, Iowa, U. S. A.

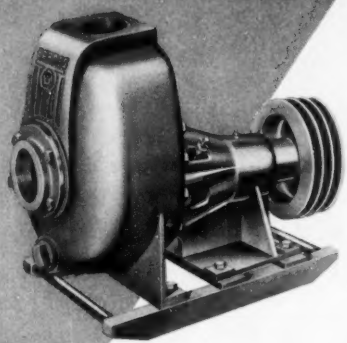
Take Your Choice!

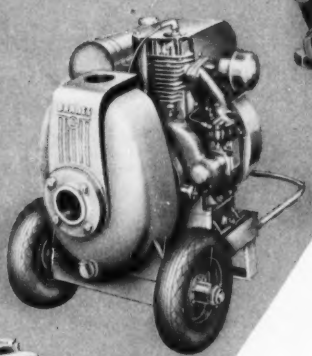
ELECTRIC MOTOR



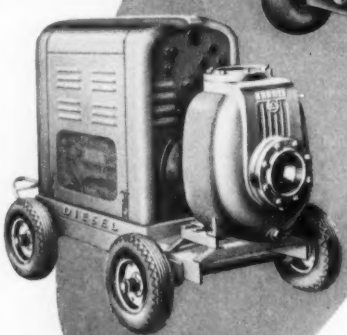
BARNES "33,000 FOR 1" PUMPS AVAILABLE IN 4 TYPES OF DRIVES

PULLEY DRIVE for use with existing power sources





GASOLINE ENGINE



DIESEL ENGINE

And whichever type of drive you choose, your choice will result in more of everything for your pumping dollar!

Barnes gives unmatched economy — 33,000 gallons of water pumped for each gallon of gas burned! Barnes gives unmatched lows in maintenance costs! Barnes gives unmatched, trouble-free service life! And Barnes Self-Priming Centrifugal Pumps give unmatched highs in overall performance. These are the reasons why Barnes Pumps are the choice of men who know pumps and pumping!

The Complete Line of Barnes 33,000 for 1 Pumps, Ranges from 3,000 to 90,000 G.P.H. AGC Rating.

FOUNDED 1895
Barnes
MANUFACTURING CO.
MANSFIELD, OHIO

Army Praises Affiliated Units Sponsored by A.G.C. Chapters

• Secretary Pace Congratulates Association

» THE HIGH quality of reserve construction units sponsored by chapters and branches of The Associated General Contractors of America in the Army Affiliation Program prompted an unusual letter of praise last month from Secretary of the Army Frank Pace, Jr.

Noting the "vital part" that the association has played in the Army's program for the past three years, Secretary Pace, in his letter to the A.G.C. commented on the "readiness," "response to active duty orders," "fine showing," and the facility with which the outfits "are becoming smooth functioning units after reaching the training centers."

He added, "It is quite apparent that they are real engineer units."

80% Make Troop List

To date, it was reported that 64 out of a possible 80 units sponsored by A.G.C. chapters and branches, or 80 per cent, have been placed on the Army's Organized Reserve Corps troop list, an excellent record.

This means that these 64 units will be kept intact and augmented as a part of the Army's regular reserve program. Individuals in other units which were unable to make the troop list may join units which are on the list.

A.G.C. Praises Units

The national A.G.C. has sent congratulatory letters to all units that have been alerted for active duty.

Major C. D. Paine

Managing Director H. E. Foreman, on behalf of the association, congratulated the commanding officer, "your officers and men . . . for being selected to serve your country during this emergency.

"We are mighty proud of you and your outfit and wish you every success . . . and if we as an association can be of any help to you and your officers and men at any time while you are in the service, please let us know."

Typical of comments received from unit commanding officers was that of Major Charles D. Paine, of the 981st Engineer Construction Battalion sponsored by the New Orleans Chapter:

"We will do our best to make your organization proud of the unit."

Sponsoring chapters and branches have shown their pride in these units at special meetings, receptions, and banquets.

Units undergoing training last Summer invariably received much commendation from camp commandant, senior instructor and other high ranking officers.

DEPARTMENT OF THE ARMY
OFFICE OF THE SECRETARY OF THE ARMY
WASHINGTON 25, D. C.

OCT 20 1950

The Associated General Contractors of America, Inc.
Munsey Building
Washington 4, D. C.

ATTENTION: Mr. H. E. Foreman, Managing Director

Gentlemen:

The Department of the Army Affiliation Program for Reserve troop units, in which your organization has played a vital part for the past three years, is already paying dividends, though the expansion of the Army is yet young.

The readiness of troop units sponsored by Chapters of the Associated General Contractors and their response to active duty orders has been most gratifying.

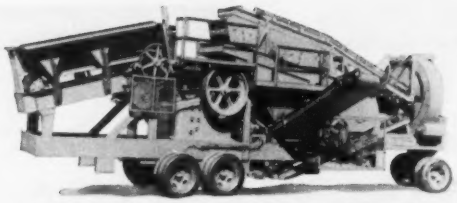
The facility with which they are becoming smooth functioning units after reaching the training centers has been observed and commented on enthusiastically by representatives of the Chief of Engineers and by commanders in the field. It is quite apparent that they are real Engineer units. I am confident that, once they are fully manned and equipped, their superior technical knowledge and experience will assure that any engineer construction project they may be given will be accomplished in a most creditable manner.

It is with pleasure that I congratulate your organization on the fine showing these units are making.

Sincerely yours,

Frank Pace Jr.

Frank Pace, Jr.
Secretary of the Army



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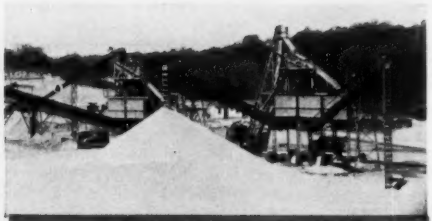

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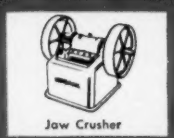
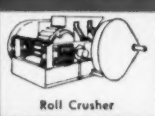
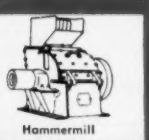


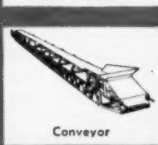
Jaw Crusher



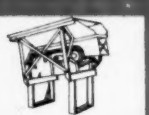
Roll Crusher



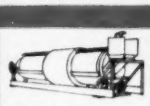
Hammermill



Conveyor

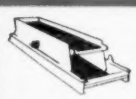


Apron Feeder



Revolving Screen—Scrubber

Bucket Elevator



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North Dakota Gets Charter as A.G.C.'s 112th Chapter

- H. E. Foreman Describes Association Advantages
- J. M. Powers President, Hendershott Manager

» THE 112TH CHAPTER of The Associated General Contractors of America was activated on September 30 when H. E. Foreman, managing director of the national association, presented a charter to the A.G.C. of North Dakota during a presentation banquet at Fargo.

Officers of the new chapter are: president, J. M. Powers, T. F. Powers Construction Company, Fargo; vice president, Lief Mattson, Isak Mattson & Son, Minot; secretary-treasurer, Orval Hagen, I. E. Orheim, Minot; and manager, R. J. Hendershott. Mr. Hendershott is also continuing as manager of the A.G.C. of Minnesota.

Industry Responsibilities

"Construction Faces Up to Its Responsibility in Peace and War" was the subject of Mr. Foreman's address to the 28 members and their guests during the morning meeting. Second only to agriculture in size, the construction industry is the source of more income and wages than any single manufacturing industry, he said.

Improvement of contract forms and specifications, construction methods and materials; cooperation with professional societies and government agencies, equipment manufacturers and distributors; encouraging the advance of accident prevention, and maintaining contact with Congress are some of the activities he mentioned which the A.G.C. carries on to benefit public and private investors, association members, and the nation in general.

Engaged in the greatest peacetime construction program in history, the industry is ready to execute all construction for national defense, he continued. Already, men trained through the A.G.C. affiliated reserve program have been called to duty. The National Security Resources Board has assigned to the A.G.C. the problem of planning how general contracting organizations can best be used in the civil defense program. Should the worst occur, the clearing of wreckage, the repairing of production facilities, and the reestablishment of normal civilian activities as completely as possible will be a task for the construction industry, he stated.

In conclusion, Mr. Foreman said, "The construction industry, in peacetime and in wartime, is of basic importance to the growth, development, and progress of the nation and all its communities, and for their defense.

"General contractors, because of their important function of taking the centralized responsibility for the actual construction of projects, have carried on through their local and national associations broad programs for establishing higher standards for the industry and improved conditions.

"The industry has the capacity to carry out all of its work, for peacetime and defense needs, with the speed and economy required . . . and takes fierce pride in its determination to carry out its work so that the public secures constantly greater value for its investment in construction."

H. W. Richardson, of New York, editor of *Construction Methods and Equipment*, also spoke.

Banquet speakers were J. R. Sweitzer, a director of A.G.C. District Six, George Heller, president of the A.G.C. of Minnesota, and R. J. Hendershott. Toastmaster was Murray Baldwin, mayor of Fargo.

During the afternoon, the builders and highway and heavy contractors' divisions met for panel discussions and to listen to a variety of speeches. Prior to the banquet, there was a meeting of the board of directors and a reception.

Directors are: J. B. Jardine and Paul Roel, Fargo; Walter Johnson and J. M. Swingen, Grand Forks; J. R. Mackley and Iver Orheim, Minot; E. A. Moline, Jamestown, and J. W. Larson, Bismarck.

Charter presentation ceremony: George Heller, president, A.G.C. of Minnesota; J. M. Powers, new chapter president; Fargo's Mayor Baldwin; Mr. Foreman; N. O. Jones, North Dakota Highway Commissioner and H. W. Richardson, New York.

Standing: E. A. Moline, a director of the North Dakota A.G.C.; A. C. Johnson, vice president, builders division; Mr. Powers, and T. C. Sornsin. Seated: W. C. Gillanders, Grand Forks; R. J. Hendershott, manager of the new chapter; I. E. Orheim, a director; J. B. Jardine, vice president, highway division; and A. M. Swingen, a director.

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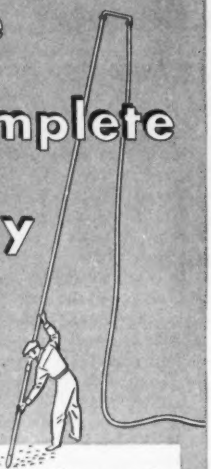

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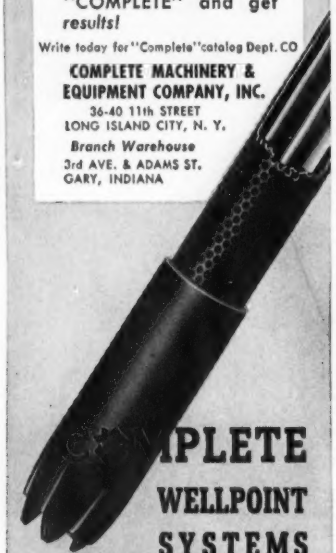

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Houston Awards Life Membership

The Houston Chapter, A.G.C., presented its third honorary life membership during a banquet attended by 60 members September 26. Distinguished recipient of the award, Otis S. Van De Mark, retired vice president of the American Construction Company, A.G.C., has served two terms as president and several years as a director of the Houston Chapter.

After 40 years in the construction industry during which he was known as "a gentleman and competitor," his fellow members presented him this honor "in recognition of his faithful adherence to the A.G.C. cardinal principles, Skill, Integrity and Responsibility."

J. D. Marshall, assistant managing director of the national A.G.C., Washington, D. C., addressed the group, giving a sketch of the economy and the immediate future of the construction industry.

From left to right are shown Howard T. Tellepsen, chapter president, Mr. Marshall, Mr. Van De Mark, and another honorary life member, Chris J. Miller.

A.G.C. Branch and Chapter Conventions

» ANNUAL meetings scheduled by chapters and branches of The Associated General Contractors of America, as reported to THE CONSTRUCTOR this month are:

Nov. 16, 1950. CHICAGO BUILDERS CHAPTER. Chicago. Builders Club.

Dec. 1-2, 1950. NORTHERN CALIFORNIA CHAPTER. San Francisco. Palace Hotel.

Dec. 3-4, 1950. MUNICIPAL CONTRACTORS ASSOC. Dallas. Baker Hotel.

Dec. 4-5, 1950. A.G.C. OF ILLINOIS. Springfield. Leland Hotel.

Dec. 5, 1950. AUSTIN CHAPTER. Austin. A.G.C. Building.

Dec. 5, 1950. COLORADO BUILDING CHAPTER. Denver. Albany Hotel.

Dec. 5, 1950. FLORIDA WEST COAST CHAPTER. Tampa.

Dec. 5, 1950. DALLAS CHAPTER. Dallas. Dallas Athletic Club.

Dec. 6, 1950. WACO CHAPTER. Waco. A.G.C. Office.

Dec. 6-7-8, 1950. WISCONSIN CHAPTER. Racine, Racine Hotel.

Dec. 7-8-9, 1950. HIGHWAY CONSTRUCTION INDUSTRY OF SOUTH DAKOTA. Rapid City. Alex Johnson Hotel.

Dec. 7-8-9, 1950. A.G.C. OF SOUTH DAKOTA. Rapid City. Alex Johnson Hotel.

Dec. 12, 1950. SEATTLE CHAPTER. Seattle. Const. Center Bldg.

Dec. 12-13, 1950. MASTER BUILDERS OF IOWA. Des Moines. Hotel Savery.

Dec. 15-16, 1950. NEW YORK STATE CHAPTER. Buffalo. Hotel Statler.

Dec. 18, 1950. SPOKANE CHAPTER. Spokane. Spokane Hotel

Dec. 20, 1950. A.G.C. OF MASSACHUSETTS. Boston. Hotel Touraine.

Jan. 9, 1951. THE MASTER BUILDERS ASSOC., INC., District of Columbia. Washington, D. C. Mayflower Hotel.

Jan. 9-10, 1951. PIPE LINE CONTRACTORS ASSOC. Houston. The Shamrock Hotel.

(Continued on page 60)

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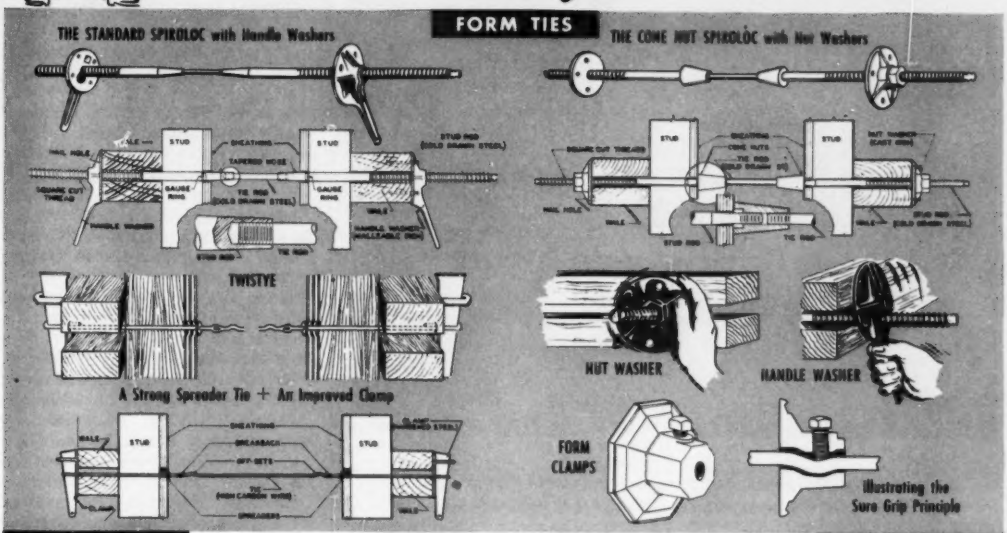

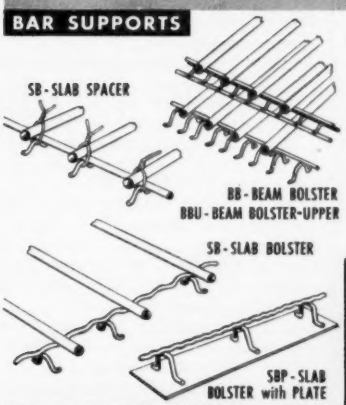

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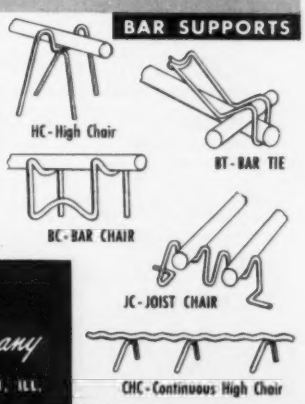

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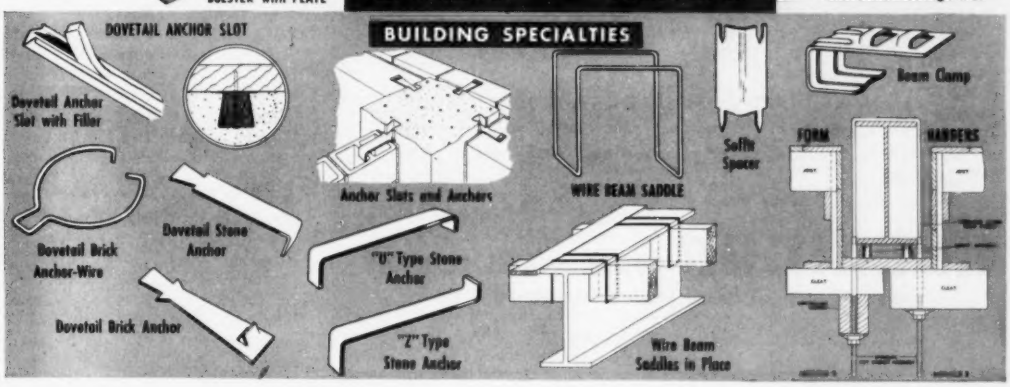

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And when it comes to service, Construction Equipment Corp., Long Island City, MICHIGAN dealer, rates "tops" with McDonnell.

Martone Sewage Disposal Co., subcontractor at Levittown, has a MICHIGAN ⅜ yd. Truck Excavator. Mr. Martone states: "We can get it in and out of small places easily. It does a *lot* of work!" James Pepe, operator, volunteered: "I've run MICHIGANS for years. They're the easiest to operate."

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CHAPTERS • BRANCHES

Jan. 10, 1951. General Building Contractors Assoc. Philadelphia.
Jan. 10-11, 1951. A.G.C. of Iowa. Des Moines. Fort Des Moines Hotel.
Jan. 11-12, 1951. Kansas Contractors Assoc. Kansas City. President Hotel.
Jan. 11-13, 1951. A.G.C. of Minnesota. Minneapolis. Radisson Hotel.
Jan. 12, 1951. Alabama Branch. Birmingham. Tutwiler Hotel.
Jan. 12-13, 1951. Montana Building Chapter. Butte. Finlen Hotel.
Jan. 12-13, 1951. Montana Contractors' Assoc., Inc. Butte. Finlen Hotel.
Jan. 13, 1951. Oklahoma Builders Chapter. Oklahoma City. Skirvin Hotel.
Jan. 17, 1951. Detroit Chapter. Detroit. Detroit Athletic Club.
Jan. 17, 1951. Louisville Chapter. Louisville. A.G.C. Building.
Jan. 19, 1951. Rhode Island Chapter. Seekonk. Hearthstone.
Jan. 19-20, 1951. Intermountain Branch. Salt Lake City. Hotel Utah.
Jan. 25, 1951. Idaho Branch. Boise. Hotel Boise.
Jan. 26-27, 1951. Colorado Contractors Association. Denver. Shirley-Savory Hotel.
Feb. 21-22, 1951. A.G.C. of Missouri. Kansas City. President Hotel.

TENTATIVE DATES

Dec. 4, 1950. Central Louisiana Chapter. Alexandria. A.G.C. Office.
Dec. 15-20, 1950. Southern California Chapter. Los Angeles. Biltmore Hotel.
Jan. 1951. Associated Building Contractors of Rockford, Ill. Rockford. Hotel LaFayette.
Jan. 1951. Nebraska Building Chapter. Omaha. (Not selected.)
Jan. 12, 1951. Baltimore Builders Chapter. Baltimore. Park Plaza Hotel.
Feb. 1951. A.G.C. of Wyoming. Cheyenne. Frontier Hotel.
Feb. 1951. Kentucky Highway Division. Louisville. (Not selected.)
Feb. 9, 1951. Constructors Association of Western Penna. Pittsburgh. Hotel William Penn.
Feb. or March, 1951. Metropolitan Builders Assoc. New York City. (Usually at University Club.)
Mar. 7, 1951. Houston Chapter. Houston. Ben Milam Hotel.
June 18, 1951. Texas Highway Branch. Austin. Austin Hotel.

Casualty Insurance Groups, A.G.C. Form Joint Committee

- Forum for Carriers and General Contractors

» THE FORMATION last month of the Joint Cooperative Committee for Accident Prevention, composed of six insurance company representatives and six members of The Associated General Contractors of America, was heralded as a big step in the direction of reducing accidents through improved cooperation between the interested parties.

General function of the committee, which is the result of combined efforts of the A.G.C. and two national insurance company associations, is liaison for workmen's compensation insurance carriers and general contractors on matters of mutual interest in construction operations.

The National Association of Mutual Casualty Companies, with headquarters in Chicago, and the Association of Casualty and Surety Companies, with headquarters in New York, have each appointed three members to the group.

The A.G.C. is represented by six members selected in pairs from the association's Insurance and Bonds Committee, Labor Committee, and Accident Prevention Committee.

At the organizational meeting October 16 in Chicago, members became acquainted in a round-table discussion concerning aims and purposes that would be satisfactory to both groups. It was suggested that accident prevention publicity be stressed, emphasizing the cost advantages to the carrier and to the contractor that would result from low accident rates.

Members of the new committee, which becomes the eighth joint cooperative committee of the A.G.C. with other national associations or societies, are as follows:

Mutual Companies (National Association of Mutual Casualty Companies)—

Frank J. Crandell, assistant vice president and construction specialist, Liberty Mutual Insurance Company, Boston. (Co-chairman.)

Otto S. Holmskog, supervising construction engineer, Employers Mutual Liability Company, Wausau, Wisconsin.

A. S. Johnson, vice president and manager, engineering department, American Mutual Liability Insurance Company, Boston.

Stock Companies (Association of Casualty and Surety Companies)—

Donald G. Vaughn, manager, engineering and inspection department, Aetna Casualty and Surety Company, Hartford, Connecticut.

Colin H. MacLeod, supervisor, engineering contract bond department, Fidelity and Casualty Company, New York.

James A. Burbank, superintendent, engineering department, The Travelers Insurance Company, Hartford, Connecticut.

(Co-secretary, Herbert Hoover, Maryland Casualty Company, Baltimore.)

Associated General Contractors—

H. B. Alexander, H. B. Alexander & Son, Inc., Harrisburg, Pennsylvania, chairman of the A.G.C. Accident Prevention Committee. (Co-chairman.)

William Curlett, Curlett Construction Company, Long Beach, California, chairman of the A.G.C. Insurance and Bonds Committee.

John H. Dahlman, Dahlman Construction Company, Milwaukee, Wisconsin.

Ira H. Hardin, Ira H. Hardin Company, Atlanta, Georgia.

Fred I. Rowe, W. L. Johnson Construction Company, Columbus, Ohio.

John A. Volpe, Volpe Construction Company, Malden, Massachusetts.

(Co-secretary, Harry J. Kirk, A.G.C. safety director, Washington, D. C.)

Minnesota Safety News

The Associated General Contractors of Minnesota have been issuing "A.G.C. Construction Safety News" twice monthly since August and will continue the publication until the end of this year's accident prevention contest. The purpose of these four bulletins is to spark local interest in the safety contest, give contest standings, and publicize accidents, their cause and prevention.

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Management-Carrier Partnership Stressed

- Maxon Tells Those Outside Industry to Act as "Umpires"

» THE IMPORTANCE of the partnership of construction firms and insurance carriers in promoting accident prevention was pointed up by G. W. Maxon, vice president of The Associated General Contractors of America, in his address to the Construction Section of the National Safety Congress last month in Chicago.

Mr. Maxon, who is president of the Maxon Construction Company, Dayton, Ohio, also pointed to the increasing dangers of too many regulations by others outside the industry which can greatly increase costs.

"Safety is big business, and like all big business in the United States, can expect to be subject to increasing regulation," he said.

Partnership for Safety

In referring to existing regulations and procedures, Mr. Maxon said that all industrial regulation is brought about by the inability of industrial management to function in the civil life of the people as efficiently as it can in its own particular industry. Hence, the rise of requirements for employee insurance, handled through insurance organizations.

The partnership between construction management and insurance carriers forced by regulations "has grown stronger year by year and has done an outstanding job in decreasing the number of accidents in construction," he added.

However, Mr. Maxon continued, since safety has become big business, "great effort is being put forth by individuals and organizations not a part of that legally constituted partnership which I have mentioned to take upon themselves, because of the fact that they are in one way or another connected with construction, the task of promulgating and enforcing certain regulatory rules which each has developed."

Regulations Confusing

While conceding that such efforts have prodded the industry into effective action, Mr. Maxon asserted that "no matter how sincere and how well intended any such effort may be, it must be administered in the field through the hands of individuals who are engaged primarily neither in the management of the construction operation, nor in the insurance protection afforded to its personnel.

"Having none of this primary interest, much confusion and unnecessary expense is injected into the conduct of any accident prevention program. This confusion results not only from a difference of opinion as to the interpretation of regulations, but also from the fact that different sets of these rules and codes, often conflicting, have been promulgated and injected into the area of management.

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22.	Equipment Record—Cardboard	.10	.50	3.50
	INVESTIGATION OF BIDDERS			
24.	Standard Pre-Qualification Questionnaires and Financial Statements for Prospective Bidders—Complete in Cover Engineering Construction (For Qualifying Before Bidding)	.20	1.80	12.00
25.	Standard Pre-Qualification Questionnaires and Financial Statements for Prospective Bidders—Complete in Cover. Building Construction (For Qualifying Before Bidding)	.20	1.80	12.00

Order No.	INVESTIGATION OF BIDDERS (Continued)	Per Copy	Per Dozen	Per 100
26.	Standard Questionnaires and Financial Statement for Bidders—Complete in Cover. Engineering Construction (For Qualifying After Bidding)	.20	$1.80	$12.00
27.	Standard Questionnaires and Financial Statement for Bidders—Complete in Cover. Building Construction (For Qualifying After Bidding)	.20	1.80	12.00
28.	Financial Statement and Questionnaire for Credit Transactions	.20	1.80	12.00
	MISCELLANEOUS			
29.	Insurance Check List	.10	1.00	5.00
30.	The Functions of a General Contractor	.10	.75	6.00
35.	A.G.C. Code of Ethical Conduct	.10	.50	3.00
36.	Concrete Mixer Standards	Single copies — no charge; quantity prices on application.		
36a.	Contractors' Pump Standards			
37.	A.I.A. Standard Form of Arbitration Procedure			
38.	Suggested Guide to Bidding Procedure			

FOR A.G.C. MEMBERS ONLY

A.G.C. EMBLEM

List of Styles and Prices on request.

SIGNS AND SEALS

40.	A.G.C. Metal Seal (red and black) 10" dia.	.40
41.	A.G.C. Decalcomania Seal (red and black)	
	a. 10" dia.	.20
	b. 5" dia.	.10

Metal Seals and Decals: 20% discount for orders of more than 50; 40% discount for orders of 200 or more.

43. A.G.C. SOCIAL SECURITY FORMS

Form SS1: Application for Employment; Form SS2: Employees' History Record; Form SS3: Employees' Employment and Earnings; Form SS4: Payroll. List of prices and styles will be furnished to A.G.C. members on request.

USE THE CONVENIENT COUPON TO PLACE YOUR ORDER

Order No.	Amount	Cost
1.		
2.		
3.		
4.		
5.		
7.		
8.		
9.		
11.		
12.		
16.		
17.		
20.		
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35.		
36.		
36a.		
37.		
38.		
40.		
41a.		
41b.		

43. Price List and Samples ☐

Price List and Styles of Emblem ☐

TOTAL COST _____

Make Checks payable to CONSTRUCTION FOUNDATION, A.G.C., Munsey Building, Washington 4, D. C.

Gentlemen: Enclosed find check for $_____ for which please send materials as ordered by number herewith.

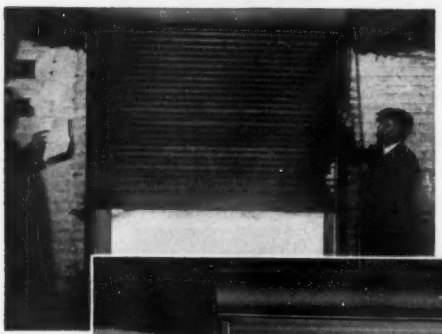
*Name*_____ *Address*_____

*City*_____ *Zone*_____ *State*_____

Nov. 1950

47 YEARS OF SERVICE

and a few repairs make it ready for 47 more



The door at left has been in continuous service since 1903—for 47 years! The picture was taken this year, just before curtain slats were replaced and a few minor repairs made. In the photo below, the door is ready for many more years of efficient service and protection.

Another User Proves the Extra Value of KINNEAR Steel Rolling Doors

You can find many similar records of long service for these famous doors in the Kinnear files—more proof that their interlocking steel-slat construction, *originated by Kinnear,* combines rugged durability and protection with smooth action and space-saving efficiency.

Kinnear Rolling Doors open straight upward and coil completely out of the way above the lintel. All surrounding floor, wall and ceiling space is fully usable at all times, because the doors need no extra room for opening and closing action.

When closed, these all-steel doors give an extra measure of protection against fire, theft, intrusion, wind and weather, or accidental damage.

Kinnear Rolling Doors, built to fit openings of any size, are easily installed in old or new buildings. Equipped for operation by hand-lift, chain, crank or electric motor. With Kinnear Motor Operators, they offer the added convenience of push-button control, plus remote controls at any number of points, if desired. Write today for complete information.

Saving Ways in Doorways
KINNEAR
ROLLING DOORS

The KINNEAR Manufacturing Co.

Factories:
650-680 Fields Ave. Columbus 16, Ohio
1742 Yosemite Ave. San Francisco 24, Calif.

Offices and Agents in All Principal Cities

carrier is more interested in accident prevention on construction than any other element which may be injected into the effort. . . . Accident prevention on the construction job will attain its greatest success under this partnership if properly operated and required to function to its full ability."

"Too Many Cooks"

Mr. Maxon added:

"If the resident engineer . . . starts out to show the employer how to do it; if labor leaders also inject themselves into the program and instead of sitting down with management to better the situation, attempt to set up their own regulations and enforce them; if state industrial commissions, and departments and bureaus of the federal government also inject themselves similarly into the elements of management, the results will be, as they have previously been shown to be, disastrous to the cost of producing the facilities which our nation needs and for which it depends upon this industry."

Others Can Be "Umpires"

In conclusion, Mr. Maxon had a word for the umpires. "To those of you who may be connected with government agencies, industrial commissions, and with other elements which promulgate safety but which lie outside, and perhaps above the partnership team, I suggest that you be the umpire, not the player. Sit down with the player and talk it over to the end that he may understand which set of rules is to be followed and what the particular rules mean so that a measure of the excellence of their management may be established and recognized by its position with respect to the accepted standards.

"Write the rules of the game, establish the scoring method, place the scoreboard in the public eye, toss the ball from the stands, get down on the field to umpire the results but let the team play the game."

Other A.G.C. members took part in the Construction Section's program. Participating in a panel discussion on "How to Do It" were H. B. Alexander, Harrisburg, Pennsylvania, chairman of the A.G.C. Accident Prevention Committee; Col. W. D. Brunig, D. W. Winkelman Company, Syracuse, New York; and R. J. Hendershott, manager of the A.G.C.'s of Minnesota and North Dakota.

Contractor reports 30% more work with ADAMS No. 610

FRESHOUR BROS.
CONTRACTING CO.
P. O. BOX 77
SWEET HOME ARK.
June 30, 1950

J. D. Adams Manufacturing Co.
217 S. Belmont Ave.
Indianapolis, Indiana

Dear Sirs:

We wish to report how well pleased we are with our 610 Adams Motor Grader that we purchased over a year ago. This machine has spread the base gravel, help mix the mineral aggregate and spread all the bituminous material on thirty-five miles of State highways to date.

We have found that this machine will do at least thirty per cent more work than any other heavy-duty machine that we have ever owned or rented.

It is a pleasure for us to recommend it to any one in the market for a motor grader.

Yours truly
FRESHOUR BROS.
By Ernest Freshour

● Read what Freshour Bros. Contracting Co. has to say about its Adams No. 610 Motor Grader.

This experience is typical. King of all heavy-duty motor graders the Adams No. 610, with 100 H.P. diesel engine, has the weight, power and speed to handle toughest grading jobs faster, easier and at lower cost than any other graders on the market.

Your local Adams dealer will be glad to give you complete information on the No. 610, as well as the entire Adams line.

J. D. ADAMS MANUFACTURING COMPANY · INDIANAPOLIS, INDIANA

Make your next motor grader an ADAMS

SLOANE
QUANTITY SURVEYS
For
All Classes of Construction

We Maintain a Large Staff of Engineers Which Assures Speed–Accuracy–Full Detail Reasonable Prefixed Charges

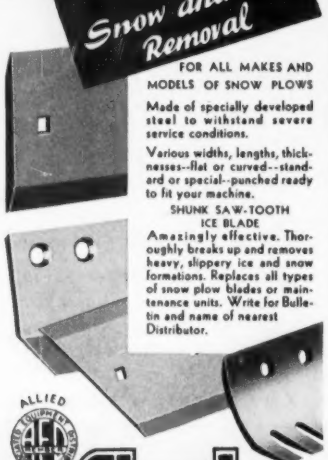
Approved by
Associated General Contractors of America and Federal, State and Municipal Authorities

Your Inquiry Will Receive Prompt Attention and Sample Estimates

H. A. Sloane Associates
Established 1922
415 Lexington Avenue
New York 17, N. Y.

SURVEYS VALUATIONS
APPRAISALS

BLADES For Snow and Ice Removal



FOR ALL MAKES AND MODELS OF SNOW PLOWS

Made of specially developed steel to withstand severe service conditions.

Various widths, lengths, thicknesses--flat or curved--standard or special--punched ready to fit your machine.

SHUNK SAW-TOOTH ICE BLADE

Amazingly effective. Thoroughly breaks up and removes heavy, slippery ice and snow formations. Replaces all types of snow plow blades or maintenance units. Write for Bulletin and name of nearest Distributor.

ALLIED

Shunk
MANUFACTURING COMPANY
ESTABLISHED 1854
BUCYRUS, OHIO

Severity Rate for 1949 Lowest on Record

• But Construction Industry Ranks 34th in 40 Industries

» THOUGH the frequency rate of accidents in the construction industry during 1949 was the same as the 1948 rate, the severity rate was the lowest on record for the industry, according to the accident rates pamphlet recently issued by the National Safety Council. Yet construction's record fell farther below the average for all industries.

The frequency rate in 1949 (the number of accidents per million working hours) for the construction industry was 19.48, and for all industries, 10.14. The severity rate (the number of days lost per thousand working hours) was 2.15, for all industries, 1.02.

Both of these rates rank worse industry-wise than the 1948 rates. In frequency of accidents the construction industry ranks 34th among the 40 industries analyzed, and ranks 33rd in severity. 1948 ranks were 28 and 32, respectively.

Fatal injuries in the construction industry were 23 per cent less in 1949 than in 1948. Temporary total and permanent partial injuries occurred at about the same rate for the two years but the severity rate for temporary total injuries was 16 per cent more for 1949.

The rate of frequency for the general building construction group was 33.87 for all injuries, a 12 per cent increase over 1948. However, the severity rate was 1.72 or 12 per cent less. The highway construction group had a frequency rate of 19.18, an increase of 10 per cent, and a severity rate of 1.64, an increase of 18 per cent.

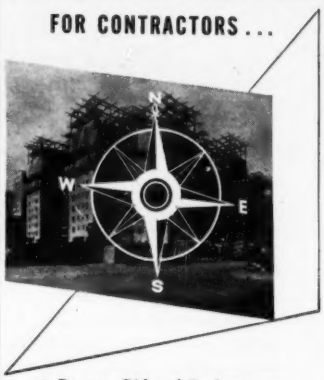
The frequency rate of 9.75 for all injuries in the marine construction group is the lowest of the 10 construction industry units analyzed. The lowest severity rate, 1.3, was achieved by the tunnels and subways group.

The average time charge for each disabling injury in 1949 was 110 days, a noticeable improvement over the 152 average in 1948. The improvement in the rate of fatal injuries is the principal reason for the lower time charge in 1949. The average for all industries for last year was 100 days for each disabling injury.

Here are percentages based on all industries which indicate the sources of injuries: handling objects, 22; machinery, 16; falls, 17; falling objects, 17; hand tools, 7; vehicles, 7; and miscellaneous, 18. Fatal and permanent total injuries were caused in the following percentage proportions: vehicles, 22; falls, 19; falling objects, 10; miscellaneous, 24; and the remainder by harmful substances, machinery, and electricity, explosions and heat. The greatest number of permanent partial injuries were caused by machinery. The handling of objects caused the greatest number of temporary total injuries. Handling of objects is the principal source of all compensable industrial injuries.

A recent study made by the Division of Labor Statistics of California shows that the greatest number of injuries occur between the hours of 10 and 11 o'clock in the morning and three and four o'clock in the afternoon. Fatigue and the pace of operations are considered to be the reasons for this phenomenon.

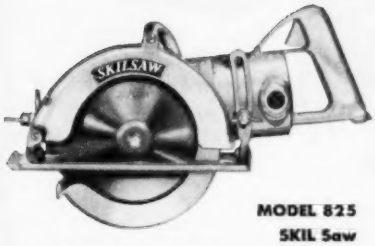
PROMPT, NATION-WIDE
BONDING FACILITIES
FOR CONTRACTORS . . .



- BONDS—Bid and Performance
- Equipment Floaters
- Complete Casualty Insurance Requirements

American Surety Group
AMERICAN SURETY COMPANY
NEW YORK CASUALTY COMPANY
SURETY FIRE INSURANCE COMPANY
100 Broadway • New York 5, N. Y.
Agents and Brokers Everywhere

Gang-cutting pays off fast with powerful, easy-handling SKIL Saw!



MODEL 825
SKIL Saw

A favorite with contractors for general home construction. Cuts up to 2⅜ in. deep. Bevel cuts up to 2⅛ in. deep at 45°. Light, compact, powerful.

Gang-cutting with SKIL Saw gets buildings up *fast*. A look at these SKIL Saw features shows you why it's perfect for day-long production sawing on the job site—

NORMAL, COMFORTABLE SAWING POSITION—With SKIL Saw's rear handle you saw without difficult reaching, straining or stretching. Less effort per cut . . . more cuts per day.

EASY, ACCURATE DEPTH ADJUSTMENT—With SKIL Saw's quick, simple depth adjustment you're ready *in seconds* to mark the second layer as you cut the top one.

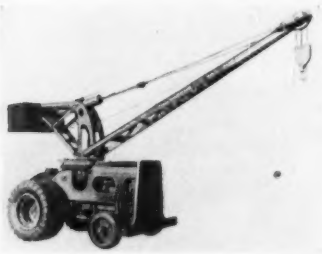
SMOOTH, EASY SAWING ON EVERY CUT—Hi-torque SKIL Saw avoids jamming and stalling. Keeps production at a peak all day long.

Ask your SKIL Tool Distributor to demonstrate SKIL Saw today. You'll be glad you did!

SKIL Products are made only by
SKILSAW, INC.
5033 Elston Avenue, Chicago 30, Illinois
Factory Branches in Principal Cities
In Canada: SKILTOOLS, LTD., 66 Portland St., Toronto, Ont.

SKIL
PORTABLE TOOLS

Crane—*Clyde Iron Works, Inc., Duluth 1, Minn.* Model UC "Handi-Crane" is mounted on Minneapolis-Moline Model UTI tractor and has high lift capacity of 5 tons. Boom is raised and lowered by hydraulic cylinder. Boom is 18′ or 24′ and rotates full 320° and has attached counterweight that permits load to be swung safely at constant radius. It has hydraulic stabilizers on front end to provide stability when handling loads over side. It has short turning radius and special roller bearing steering mechanism. Pintle hook permits using crane for towing service as well as handling materials.

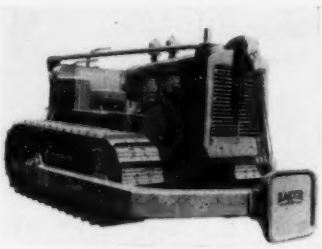


Clyde Model UC "Handi-Crane"

Scaffolding—*Amidon Sales Co., Box 61, Elyria, Ohio.* Scaffolding system is made up of standard pipe and patented fittings. Fittings are: (1) 3-way fitting for connecting longitudinal, transverse and vertical pipes into single corner joint and for attaching one or 2 diagonal braces; (2) 2-way fitting for fastening 2 pipes at right angles, as in attaching single diagonals, outboard brackets, guard rails and ladder rungs; (3) sleeve for joining lengths of pipe and for attaching casters. ***Described and illustrated in Bulletin 501, available from manufacturer.***

Goggle—*American Optical Co., Southbridge, Mass.* One-piece, one-oz. all-plastic safety goggle is designed to fit all faces. It is "optically correct," affords wide-angle vision and can be worn over most standard types of personal glasses and most prescription spectacles and goggles. It is supplied in clear or green plastic styles and has adjustable elastic headband.

Pusher—*Baker Manufacturing Co., Springfield, Ill.* Pusher for use with Allis-Chalmers HD-19 tractor weighs approximately 725 lbs., is heavily reinforced, and is designed to work with practically all types of scraper push plates. It is available as complete unit or as attachment.



Baker HD-19 pusher

DIG REAL DIVIDENDS!

WELLMAN

Williams Type

Welded Buckets

Operators prefer the Wellman Bucket for its balance, easy handling, and digging power. Owners prefer the Wellman Bucket for its bigger payloads, lower maintenance cost. These features are not accidental. Wellman pioneered in welded construction of rolled steels which make these buckets lighter, stronger, for greater yardage at lower costs. In all types and sizes, you'll do better with a Wellman!

There's a Wellman Bucket for every service

THE WELLMAN ENGINEERING COMPANY

7015 CENTRAL AVENUE CLEVELAND 4, OHIO

"FROM NOW ON... IT'S NELSON PORTABLE HEATERS FOR ME"

THE HEATER WITH THE

SEALED FLAME

THAT POSITIVELY PREVENTS CARBON MONOXIDE POISONING!

Smart operators in the construction business are making certain Herman Nelson Portable Heaters are at work for them. There's a one-word reason—SAFETY!

When a builder finds he gets more production from workmen, gets a unit that is so adaptable he can use it for heating, thawing or drying anywhere, anytime—he's sold and he'll tell you so. Remember, this is heat that pays for itself!

That's why more Herman Nelson Portable Heaters than ever will speed construction jobs through the coldest months this winter.

MAKE A DEAL now with your nearest Herman Nelson dealer—while he can supply you without a long wait. For his name just write to Dept. C-11 at the address below.

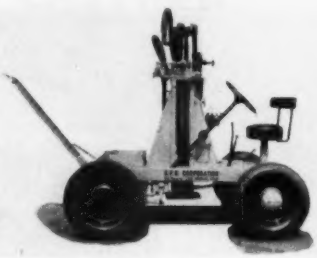
HERMAN NELSON
DE LUXE I MODEL PORTABLE HEATER

- Electric Motor Powered
- Uses Kerosene for Heating Fuel
- 280-450,000 BTU Capacity
- Totally Enclosed Stainless Steel Combustion Chamber
- Completely Automatic Operation
- Automatic Temperature Control
- Free from Dangers of Fire, Smoke and Noxious Gases
- Remote Control Thermostat Optional
- Easily Portable by One Man

AAF herman nelson

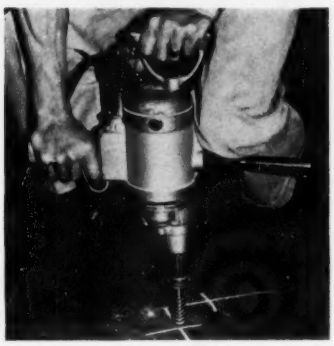
HERMAN NELSON DIVISION
AMERICAN AIR FILTER COMPANY, INC.
Moline, Illinois

Pavement Breaker—*R.P.B. Corp., 2751 E. 11th St., Los Angeles 23.* Model B "Mighty Midget" is automatically controlled, which eliminates most of upsurge of piston against top head and of over-reach on bottom head. Equipped with 200# head, it has conventional automobile rear end, driving on both wheels. Automatic attachment is operated by auxiliary cylinder standing parallel with main cylinder and actuated with guide rod which has piston on one end. As hammer is put in motion, auxiliary cylinder pumps air to piston which actuates valve. Length of stroke is regulated by letting in desired amount of air, discharging remainder by opening by-pass. Propelling mechanism of machine is powered by motor through gear box attached at stub end of drive shaft. Driving mechanism is engaged and disengaged from motor by throwing lever on drive shaft. Cylinder and elevating mechanism are identical with those of original "Mighty Midget" introduced 2 years ago. Wheels are 15", width of wheel base is 58" from center to center, tires are 7.10x15, frame is 48"x 60". Over-all length of machine is 87", width, 65", height, 78" (with hammer in lowered position.



R.P.B. Corp.'s Model B pavement breaker

Concrete Drill Bits—*Concrete Termite Drill Co., 2077 Foothill Blvd., Pasadena 8, Calif.* New line of concrete drill bits, known as "Stubbies," are extra short rotary drill bits designed for drilling holes for shields and anchors in concrete and masonry. They have over-all length of 4" and are furnished in sizes for drilling holes from ¼" to ⅞" in diameter in increments of 1/16". They have shank diameters of ¼" to ½" and may be used in electric drills, air motors or in hand brace. Bits have "WICTU" inserts (sintered tungsten-titanium carbide) for high abrasive resistance. Inserts and drill are same diameter.

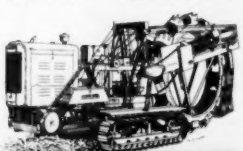


Concrete Termite Drill Co.'s "Stubby"

You'll Keep Your CLEVELAND TRENCHERS Busy

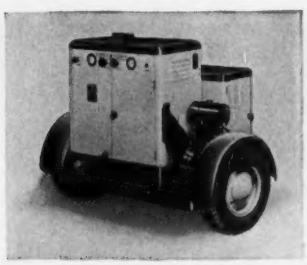
—MORE HOURS
—MORE DAYS
—ALL YEAR 'ROUND

Your equipment pays off only when it's working—not when it's traveling between jobs, in the repair shop or waiting for a specialized type of work. CLEVELANDS pay off with more actual productive time because these comparatively light, handy machines jump quickly from job to job on fast truck or trailer—because CLEVELANDS sturdy structural design and tough construction cut maintenance down-time and allow tough, off-season digging—and because each CLEVELAND model's remarkable versatility and wide range of trench sizes mean each machine fits more different kinds of work. You'll keep your CLEVELANDS busy—busy making profits for you. See your distributor today.



THE CLEVELAND TRENCHER CO. • 20100 ST. CLAIR AVENUE, CLEVELAND 17, OHIO

Equipment Cleaner—*Clayton Manufacturing Co., El Monte, Calif.* Gasoline engine-powered steam cleaner is offered in two models: Model A, with 120-gal. capacity; Model AR, which combines steam cleaner of 150-gal. capacity and high-pressure rinse unit of 275 gals. per hour. Both models are available in stationary, portable or trailer types.



Clayton steam cleaner

Truck-Crane—*Wayne Crane Division, American Steel Dredge Co., Fort Wayne, Ind.* Model 40 12½-ton truck-mounted crane-excavator has swing speed of 6.4 r.p.m. and travels at truck speeds. It converts to all crane and shovel attachments. Carrier features wide-flanged deep-section I-beam frames, equalizing beam-type suspension and locking third differential. Auxiliary transmission provides 10 forward and 2 reverse speeds. Machine lifts, booms and swings either simultaneously or independently. Standard power unit is 6-cylinder gasoline engine which develops 105 h.p. at 3,200 r.p.m. Other gasoline and diesel engines are available.

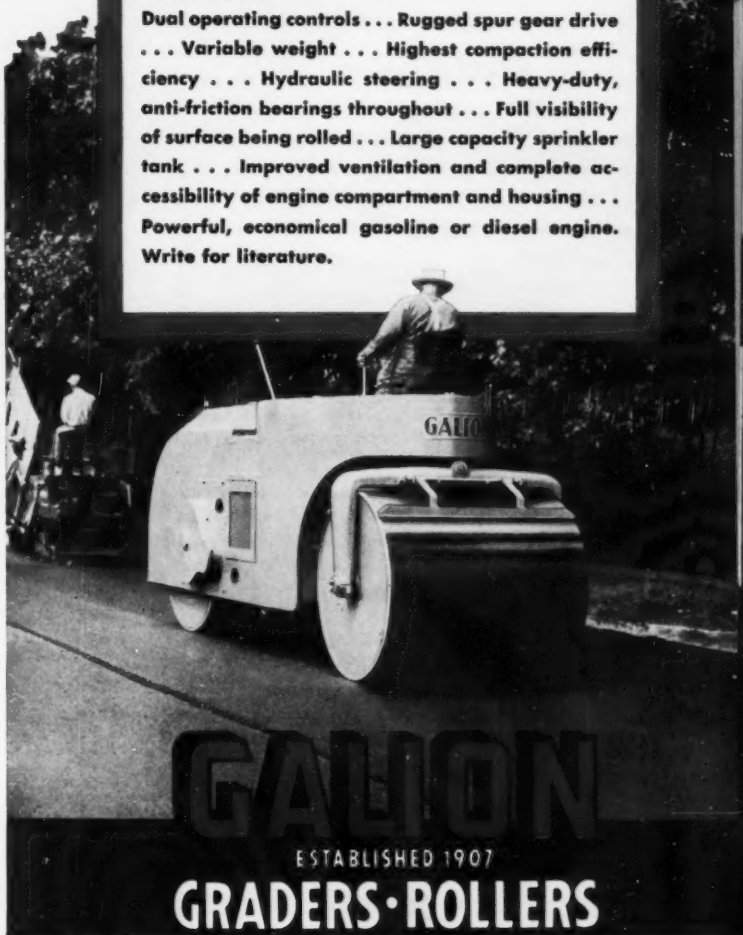
Steam Generator—*Vapor Heating Corp., 80 E. Jackson Blvd., Chicago 4.* Portable vapor steam generator, Model 4635, develops 200 lbs. working steam pressure in 2 minutes from cold water and makes over 3,500 lbs. of steam an hour at 75 to 300 lbs. steam pressure. This is accomplished by hot gases from forced-draft fuel-oil fire wiping over 575′ steel coil. Automatic controls turn off machine when predetermined steam pressure is reached and turn it on when pressure drops 15 lbs. Five h.p. electric motor or gas engine supplies power to drive water pump, blower, ignition and fuel pump. There is no reservoir of water heated under pressure, water being turned into steam as it is pumped through coil.

GALION
TANDEM ROLLERS
Give you
Advanced Features

for
Better-Than-Ever PERFORMANCE

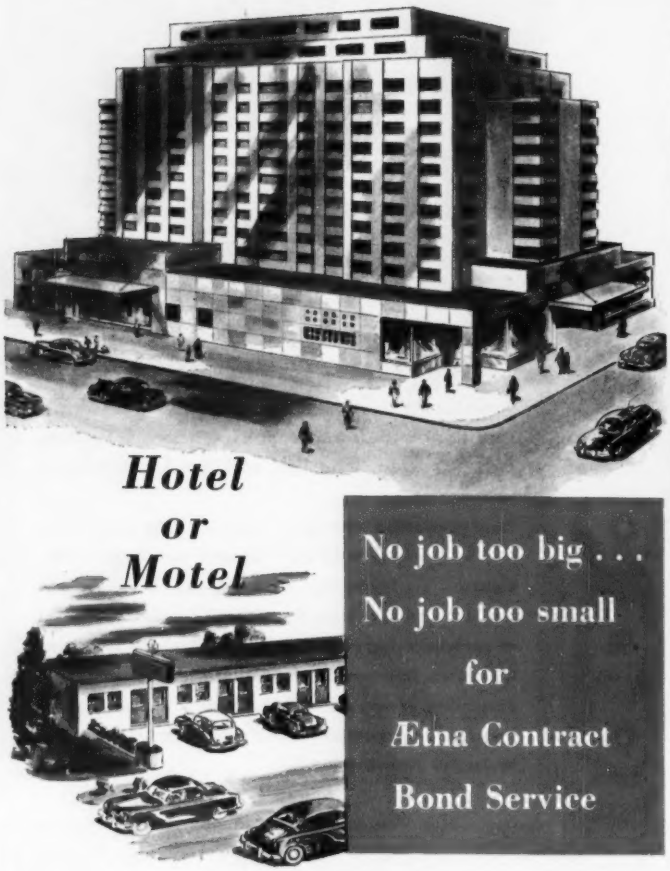
Some of the advanced GALION features which assure easy and precise control, efficient operation, easy servicing, long life, and the finest finished surfaces are:

Dual operating controls . . . Rugged spur gear drive . . . Variable weight . . . Highest compaction efficiency . . . Hydraulic steering . . . Heavy-duty, anti-friction bearings throughout . . . Full visibility of surface being rolled . . . Large capacity sprinkler tank . . . Improved ventilation and complete accessibility of engine compartment and housing . . . Powerful, economical gasoline or diesel engine. Write for literature.



GALION
ESTABLISHED 1907
GRADERS • ROLLERS

THE GALION IRON WORKS & MFG. CO.
General and Export Offices - Galion, Ohio, U.S.A.
Cable address: GALIONIRON, Galion, Ohio



No matter what the size of his job, there are certain things which every contractor has a right to expect from his Surety.

Its representatives must be prepared to give prompt, efficient service in home territory or distant cities. Its underwriting policies must be progressive, based on full understanding of the contractor's many problems. Its resources and reputation must command the unquestioned respect of architects, owners, engineers and public officials in all parts of the country.

Because The Ætna Casualty and Surety Company fulfills these requirements, it has become one of the nation's foremost Sureties. Before you start figuring your next project which requires a contract bond, why not ask your local Ætna representative to tell you more about this service?

Agents from coast to coast

ÆTNA CASUALTY AND SURETY COMPANY

The Ætna Life Affiliated Companies write practically every form of insurance and bonding protection

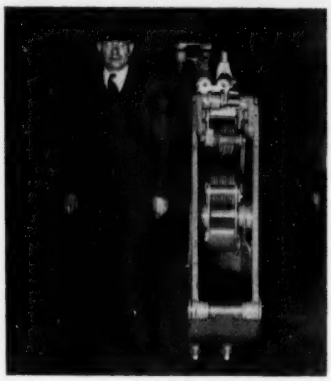
LIFE AND CASUALTY
Ætna Life Insurance Company
Ætna Casualty and Surety Company

FIRE AND MARINE
Automobile Insurance Company
Standard Fire Insurance Company

Hartford 15 Connecticut

NEW EQUIPMENT • MATERIALS

Trenching Bucket — *George Haiss Mfg. Co., 141st St. to 144th St. on Park Ave., New York 51.* New ¼-yd. capacity heavy-duty trenching clamshell bucket is 16″ wide. It is furnished with set of 4 heat-treated abrasion-resistant alloy steel digging teeth and 1¼″ x 10″ carbon steel digging jaws. Rated capacity is 7 cu. ft., heaped capacity, 10 cu. ft.



Haiss narrow trenching clamshell bucket

Excavator — *Pippin Construction Equipment, Inc., White River Junction, Vt.* Model EX-100 is combination digger and loader attachment for Ford and Ferguson tractors. Hydraulically operated, it digs to 7′ depth, back-hoes by reversing regular shovel, digs plumb trenches on side hills up to 15° grades, back-hoes and front-hoes 22″-wide trench, elevates shovel bucket 10′ above grade and swings load laterally in 110° arc.

Powder-Powered Tool—*Ramset Fasteners, Inc., 12117 Berea Rd., Cleveland 11.* Dual action is principal feature of 14 improvements in light-duty Ramset fastening tool. Dual action offers choice of "turn" or "tap" operation, former for general working conditions, latter for applications in confined locations. New safety features of tool include: engineering control which makes it impossible to operate at angles greater than 15° between outer edge of shield and work surface; larger shields; precision detonation of powder loads by single point firing pin; telescoping barrel which has to be depressed to make tool operate; combination of controls which require instruction to operate.

Stud Welding—*Nelson Stud Welding Division, Morton Gregory Corp., Lorain, Ohio.* Two special power units are designed for use with Nelson stud welding equipment. One unit is motor-operated generator set capable of welding studs up to and including ⅝" in diameter. Other is battery-operated unit which can install studs up to ½" in diameter with Nelson automatic stud welding gun. Generator unit weighs 800 lbs. Either 220-volt or 440-volt, 60-cycle alternating current can be used with new power unit. Battery unit consists of 12 6-volt, 150-amp. wet storage batteries mounted on frame and covered with hood. Automatic battery-charging device is mounted on top of hood. It weighs approximately 1,100 lbs.

Nelson motor-operated generator

Concrete Finishing Material—*Irvington Form & Tank Corp., Dept. CSR-S, 20 Vesey St., New York 7.* "Speed Finish" is used in place of rubbing method of finishing concrete. It does not destroy any properties of concrete, but develops a mechanical and chemical bond with it and protects it against weather, abrasion and spalling, according to manufacturer.

Forms—Irvington offers new type Atlas square edge form, designed for use on architectural concrete. It is supplied with Atlas "captive fastener" which is permanently attached to form. Forms can be crane-handled in large panels or in light individual units for erection by one man. They can be used with wood or steel walers using any standard make wall ties. Basic units are 12" wide and are supplied in varying lengths from 4' to 8'.

THE WORLD'S MOST COMPLETE LINE!

A complete line of Engine Powered and Electric Motor Driven, Self-Priming and Non Self-Priming Centrifugal Pumps - - - -

CONTRACTORS' PUMPS
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TRASH-TYPE PUMPS
PETROLEUM PUMPS
IRRIGATION PUMPS

Gorman-Rupp answers your Pumping Problem

Come to us with your pumping problems. We can furnish you with any size of self-priming centrifugal pump ranging in capacity from ¾ inch, 1000 GPH to the big 10 inch, pumping 240,000 GPH.

Gorman-Rupp Pumps are GUARANTEED **in plain language** by us and our distributors. They will pump more dirty water, more hours with less gasoline, will prime quicker and at higher suction lifts than any other self-priming pump. Write us about your pumping problems — ask for a copy of our guarantee.

New Contractors' Pump Bulletin 8-CP-11 furnished on request.

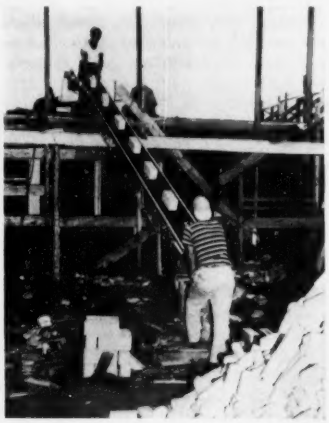
THE GORMAN-RUPP COMPANY
MANSFIELD, OHIO

Saw Measuring Guide—*Clipper Manufacturing Co., Dept. C, 2800 Warwick, Kansas City, Mo.* "Guide-A-Cut" is cast metal adjustable measuring guide adaptable to any Clipper masonry saw conveyor cart. It permits making angle cuts (45° and 90°) without tacking material guide strips on conveyor cart or using special cart. It holds material firmly to eliminate slipping.

Clipper "Guide-A-Cut"

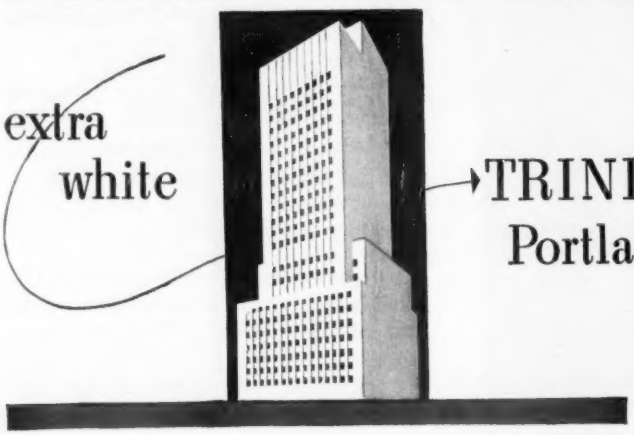
Dragline Dump Block—*Baer Steel Products, Inc., Auburn, Wash.* Dump block sheave turns on over-size roller bearing to give full dumping force to bucket load when dragline is slacked off. To prevent fouling or fraying of dump line, housing throat is faired into sheave ropeway. Over-size retainers seal Zerke-lubricated bearing. Housing and sheave are of extra-tough cast "Fibraloy" steel.

Conveyor—*Mar-Rail Conveyor Co., 560 York Ave., Pawtucket, R. I.* "Brik-Toter" conveys bricks, tile, blocks, sand, lime, short lengths of lumber. Two men can move it into position. It is 20′ long, 14½″ wide, weighs 385 lbs. Load capacity is over 1,200 lbs. evenly distributed. It is of bridge-type trussed construction and torque frame. It is equipped with 12″ wide 3-ply rough-top vulcanized rubber belt. Bed is constructed with 16 gage 2″ diameter tubular rolls, ball bearing mounted, spaced on 12″ centers and assembled in heavy gage 3″x1″ pressed steel channel frames. Totally enclosed ½ h.p. gear motor furnishes drive. Gasoline motor drive is available at extra cost. Fixed speed of belt is 60′ per minute. Conveyor raises materials 10′ from ground. End can be mounted on blocks to increase lift.



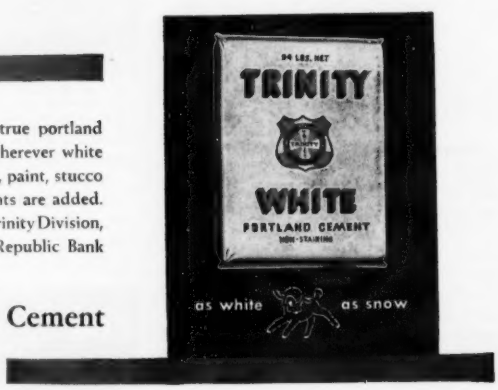
Mar-Rail Conveyor Co.'s "Brik-Toter"

extra white



TRINITY WHITE
Portland Cement

For fine results use Trinity — the whitest white cement. A true portland cement that meets Federal and ASTM specifications. Use it wherever white cement is called for—in architectural concrete units, terrazzo, paint, stucco and all light-reflective uses. Gives pure colors when pigments are added. Standardize on Trinity White for appearance and satisfaction. Trinity Division, General Portland Cement Co., 111 W. Monroe St., Chicago; Republic Bank Bldg., Dallas; 816 W. 5th St., Los Angeles.



TRINITY WHITE is a *true* Portland Cement

NEW LITERATURE

Soil Compactor—*Iowa Manufacturing Co., Cedar Rapids, Iowa.* Bulletin COMP-3 on "Cedarapids" vibratory soil compactor describes compaction of soil by vibratory pneumatic-tired rollers. Detailed description of action of compactor is illustrated with drawings which show what happens to soil under compaction. Construction details of Models 25 and 60 are given and job test reports are included.

Impact Breaker—Iowa's Bulletin IMP-1 describes double impeller impact breaker, recently acquired from New Holland Manufacturing Co. Method by which breaker produces cubical shaped aggregate is described and construction features are illustrated. Dimensions and specifications are included.

Road Machinery—*White Manufacturing Co., Elkhart, Ind.* Catalog 32-D, *Machinery for Construction and Maintenance of Roads and Streets,* presents complete line of White road-building machines. Included are portable and stationary asphalt plants, concrete vibrators, asphalt and tar heating kettles, front-end loaders for wheel-type tractors, tool and surface heaters and kerosene torches. Various models are pictured, operation explained, and specifications are given.

Hoist—*Harnischfeger Corp., Hoist Division, 4418 W. National Ave., Milwaukee 14.* Bulletin H-20 covers new models of P&H "Zip-Lift" electric hoists. Illustrated with nearly 2 dozen large installation pictures, bulletin contains full descriptions and specifications of all models. Large cut-away drawing shows construction features.

Pumps—*The Jaeger Machine Co., 528 Dublin Ave., Columbus 16, Ohio.* Catalog P-10 presents Jaeger line of "Sure-Prime" contractors' pumps. Catalog is made up in sections which are offered separately if desired. Sections are: dewatering pumps, pressure pumps, electric pumps, wellpoint systems, useful data on selecting correct pump, pipe and nozzles. Various models of each type pump are illustrated, their features described and specifications given.

Tractors—*Caterpillar Tractor Co., Peoria 8, Ill.* New quarterly publication, called *Service Reporter,* presents information on how to keep Caterpillar equipment in good working condition. First issue carries story on serv-

WHEN BUYING A VIBRATOR

It Pays to Insist on a JACKSON

Jackson vibrators are the products of more than 27 years of specialization in this field, and are offered in a wide range of models to give you the vibrator that exactly suits your particular needs on every type of construction . . . the one that will give you the greatest savings in time, labor and money; plus UNMATCHED DEPENDABILITY.

FOR GENERAL CONSTRUCTION

THE POWERFUL, Handy JACKSON ELECTRIC

2½ HP Motor. Powerful enough to handle the stiffest mixes with maximum length of shaft (28'). Operates from light-socket; 115 volt, single phase AC or DC. 8,000 to 10,000 VPM. Weighs only 50 lbs. Available with three vibrator heads for thin or thick sections. Model No. FS-150A.

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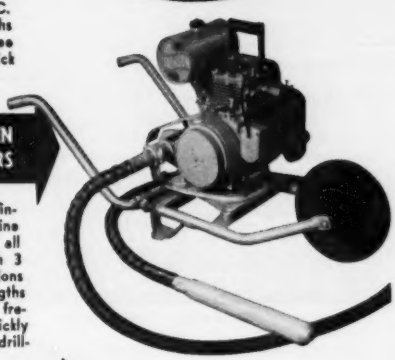
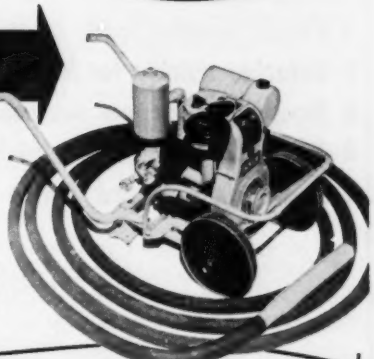
Proved on countless jobs the finest of its class. 4.7 HP engine — plenty of power under all conditions. Available with 3 heads for thick or thin sections and shafting in 7' and 14' lengths up to 28'. Instantly variable frequency up to 7500 VPM. Quickly converted to grinding and drilling. Model FS-6A.



THE HYDRAULIC with the TIME-SAVING 50' REACH

the hard-to-reach spots are easily accessible with this machine and much time is saved by eliminating changes of power unit location. All moving parts run in oil under pressure—no maintenance required. 7 HP engine and 2¾" head assures perfect compaction under most severe conditions. 4,000 to 7,000 VPM — instantly variable. The finest vibrator of its type money will buy.



FOR EVERY PHASE OF CONCRETE VIBRATION

from thin sections to mass construction and paving you will find the ideal Jackson Vibrator FOR SALE or FOR RENT at your Jackson Distributor. Write for your free copy of the "POCKET GUIDE" describing the complete line.

ELECTRIC TAMPER & EQUIPMENT COMPANY
LUDINGTON, MICHIGAN

ice requirements of equipment in winter. Circulation is through Caterpillar dealers.

Forming System—*Symons Clamp & Mfg. Co., 4259 W. Diversey Ave., Chicago 39.* Symons panels with steel cross members are presented in new bulletin. Three different size panels and individual pieces used in constructing steel cross members are illustrated. Also included is chart showing hardware required for panels with steel cross members.

Crushing and Screening Plant—*Universal Engineering Corp., 331 8th St., N.W., Cedar Rapids, Iowa.* Universal 293QS "TwinDual Gravel King" is presented in Bulletin U501. Featured is scalping screen which bypasses pit run material of finish size directly to delivery conveyor and bypasses material not requiring primary crushing in jaw crusher directly to roll crushers. Diagrams illustrate product combinations available.

Conveyor—*Barber-Greene Co., Aurora, Ill.* Bulletin 374 describes complete range of Model 374 heavy-duty portable conveyor and lists fields of use and products handled. Series of sketches show applications in industry and construction. Accessories such as feeders, screens, hoppers, etc., are pictured and uses described. Construction features are illustrated and described. One page shows other material-handling equipment manufactured by Barber-Greene.

Shovel—*Marion Power Shovel Co., Marion, Ohio.* Type 43-M one cu. yd. excavator is described in Bulletin 400. Applications as shovel, dragline, clamshell, crane, backhoe and pile driver are listed and illustrated.

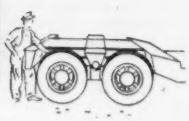
Dump Truck—*Euclid Road Machinery Co., Cleveland 17.* Bulletin, Form 151, presents Model UD rear-dump Euclid, smallest off-highway hauling unit built by company. Model is described in detail and illustrations and specification data are included.

Loader—*Service Supply Corp., Philadelphia 32.* "Lodover," 1-yd. combination overhead and front-end shovel for International Harvester tractors, is described in Bulletin LO-200. Advantages of overhead loading through elimination of turns are described.

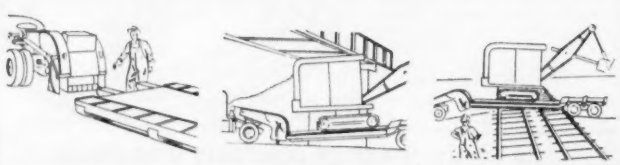
Diesel Engines—*GMC Truck & Coach Division, General Motors Corp., Pontiac, Mich.* Pamphlet describing "inside" information on diesel engines used in GMC trucks is written in form of information quiz. It answers such questions as, "What is 2-cycle?" "Are diesels hard to start?" "What is fuel injection pressure?" "Why use a governor?" "Are diesel exhaust gases poisonous?" "Why aren't diesels used in autos?" "Is GM diesel supercharged?" and others.

Trussed Rafters—*Timber Engineering Co., 1319 18th st., N. W., Washington 6.* Origin, development and acceptance of wood frame "Teco" trussed rafters for roof construction are set forth in new booklet, *Wood Frame Teco Trussed Rafters.* Booklet shows their adaptability to small industrial and commercial buildings, churches, schools, apartments, factory buildings,

THE *Distinctively* DIFFERENT
ROGERS POWER LIFT
Demountable Gooseneck Trailer
PATENTS PENDING



1 Carries heavier loads on larger tires.
2 Detaches quickly for fast, easy front loading.
3 Stoops to clear low overhead obstructions.
4 Raises its deck to clear high banked crossings.
5 Is detached, loaded and re-attached in 5 minutes.



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ECONOMY
METAL FORMS

NEW LITERATURE

warehouses, recreation buildings, etc. Detailed descriptions are included of latest approved methods of applying "Teco" wedge-fitted split-ring connectors and "Trip-L-Grip" framing anchors.

Wagon-Scraper—*The Heil Co., Milwaukee 1.* Bulletin RM-50008 presents 2C800 "Heiliner" through job pictures, cut-aways and specifications of machine with interchangeable scraper and bottom-dump wagon. Featured are patented "Hydro-Steer" and "Super-Axle" and Cummins 200 h.p. diesel engine.

Statement of the Ownership, Management and Circulation Required by the Act of Congress of August 24, 1912, as Amended by the Acts of March 3, 1933, and July 2, 1946.

Of The Constructor, published monthly at Washington, D. C., for October 1, 1950.

1. The names and addresses of the publisher, editor, managing editor, and business manager, are:

Publisher: The Constructor, Inc., 1227 Munsey Building, Washington 4, D. C.

Editor, H. E. Foreman, 1227 Munsey Building, Washington 4, D. C.

Managing Editor, William E. Woodruff, 1227 Munsey Building, Washington 4, D. C.

Business Manager, M. S. Beck, 1227 Munsey Building, Washington 4, D. C.

2. The owner is: (If owned by a corporation its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual member must be given.)

The Constructor, Inc., 1227 Munsey Building, Washington 4, D. C.

The Associated General Contractors of America, Inc., 1227 Munsey Bldg., Washington 4, D. C.

Walter L. Couse, president, Walter L. Couse & Co., Detroit Mich.

G. W. Maxon, vice president, Maxon Construction Co., Inc., Dayton, Ohio.

William Muirhead, secretary-treasurer, Wm. Muirhead Construction Co., Durham, N. C.

3. The known bondholders, mortgagees, and other security holders owning or holding one per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.)

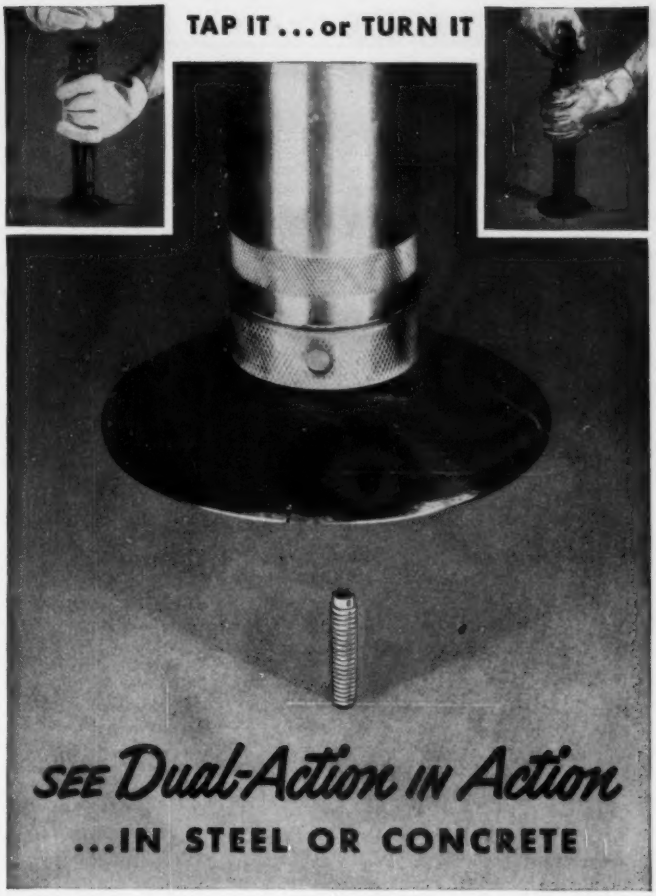
There are no known bondholders mortgagees, or other security holders than listed above.

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. M. S. Beck, *Business Manager.*

Sworn to and subscribed before me this 2d day of October, 1950.

(seal) Elsie L. Leishear.

(My commission expires Dec. 31, 1953.)



At no cost to you, we'll do an actual fastening job for you, in steel, concrete, other building materials, with Ramset Dual-Action Fastening Tool ... the only powder-actuated tool that offers this *dual choice* of TURN ... or TAP ... operation for easier, faster fastening in more locations.

We'll show you how DUAL-ACTION has more built-in stability than ever before. We'll prove also, the extra utility, extra economy of Ramset Dual-Action. Long life and dependability, too, come from precision-built, hardened steel parts, that resist continuous wear and corrosion.

With varying strengths of powder charges to insure correct penetration, with widest range of steel drive pins and threaded studs, and with DUAL-ACTION, you'll save time, work, money. Call your local Ramset Specialist or write us for free sample demonstration. Ramset Fasteners, Inc., *12117 Berea Road, Cleveland 11, Ohio.*

Ramset Fastening System
Pioneer in powder-actuated fastening

J. R. Munro, general factory manager of CATERPILLAR TRACTOR Co., has been appointed to the newly created position of director of manufacturing. C. A. Woodley succeeds him as general factory manager. W. L. Naumann and Lloyd J. Ely have been appointed assistant general factory managers.

A. R. Kelso has been elected vice president of MACK TRUCKS, INC. He will be in charge of manufacturing and production at all Mack plants.

Donald B. Olen has been appointed to the newly created position of works manager of THE FOUR WHEEL DRIVE AUTO Co. He will have direct supervision of engineering and manufacturing phases of FWD operations. . . . Clarence Piehl, formerly manager of the FWD cost department, has been appointed executive asistant to M. O. Stockland, director of sales.

THE OSGOOD CO. and THE GENERAL EXCAVATOR CO. have combined their sales management and policies for the distribution of their excavating and crane equipment. L. O. McLean, former sales manager of General, has been appointed director of sales development. James S. Fortiner, formerly assistant to the vice president of the Osgood and General companies, has been appointed sales manager for the combined office. Kenneth O. Williamson is assistant sales manager. George Day, former sales manager of The Osgood Co., has retired after spending 45 years in the power shovel industry, 30 of them with Osgood.

Harold K. Beck has been appointed commercial vice president, in addition to his present post as manager of the Washington office of WORTHINGTON PUMP AND MACHINERY CORP.

Obituary

Chester Andrew Orr, 67, chairman of the board of The Union Metal Manufacturing Co., died October 10. Mr. Orr was a member of the group which purchased Union Metal in 1925. He was named vice president and general manager. He became president in 1926 and board chairman in 1937.

Brand for Treated Lumber

Monsanto Chemical Co. has registered a brand to identify construction lumber and other wood items preserved against decay and insects with Monsanto's penta.

The brand, "MP" (for "maximum protection") will be licensed to plants qualified to treat by the vacuum-pressure process in accordance with specifications being established by the company. The identifying mark, a pentagon containing penta content and other information, is to be indelibly stamped onto each piece meeting specifications.

Penta is an oil-borne wood preservative accepted as standard by American Wood Preservers Association.

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A rational method of construction for elevated express highways, heavy underpasses, underground garages, containers and ducts carrying liquids.

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ADVERTISERS' PRODUCTS

Manufacturers' addresses are listed on page 83

Air-Entraining Agents
A. C. Horn Co.

Asphalt Plants (Portable)
Barber-Greene Co.
Iowa Mfg. Co.
White Mfg. Co.

Axles (Truck)
Eaton Mfg. Co., Axle Division

Backfillers
Bucyrus-Erie Co.
Cleveland Trencher Co.
Harnischfeger Corp.
Parsons Co.

Batchers
Blaw-Knox Division
Butler Bin Co.
Construction Machinery Co.
Heltzel Steel Form & Iron Co.
C. S. Johnson Co.

Bearings (Anti-Friction, Tapered Roller)
Hyatt Bearings Division
Timken Roller Bearing Co.

Bins
Blaw-Knox Division
Butler Bin Co.
Heltzel Steel Form & Iron Co.
Iowa Mfg. Co.
C. S. Johnson Co.
Supremix, Inc.
Universal Engineering Corp.

Bits (Detachable Drill)
Ingersoll-Rand Co.
Timken Roller Bearing Co.

Blades (Grader, Maintainer, Snow Plow, Bulldozer, Scarifier)
Shunk Manufacturing Co.

Bridges
American Bridge Co.
Armco Drainage & Metal Products

Buckets (Clamshell & Dragline)
Blaw-Knox Division
Bucyrus-Erie Co.
Harnischfeger Corp.
C. S. Johnson Co.
Owen Bucket Co.
Wellman Engineering Co.

Buckets (Concrete)
Blaw-Knox Division
Construction Machinery Co.
Heltzel Steel Form & Iron Co.
Jaeger Machine Co.
Owen Bucket Co.

Building Papers
Sisalkraft Co.

Buildings (Steel)
Allied Structural Steel Cos.
American Bridge Co.
Armco Drainage & Metal Products
Clinton Bridge Works
Gage Structural Steel Co.
Macomber, Inc.

Buildings (Steel)—Continued
Midland Structural Steel Co.
Smooth Ceilings System
Truscon Steel Co.

Bulldozers
J. D. Adams Mfg. Co.
Bucyrus-Erie Co.
R. G. LeTourneau, Inc.

Car Pullers
Clyde Iron Works

Ceilings
Smooth Ceilings System

Cement (Common and Special)
Halliburton Portland Cement Co.
Lehigh Portland Cement Co.
Lone Star Cement Corp.
Universal Atlas Cement Co.

Cement (White)
Trinity White, General Portland Cement Co.
Universal Atlas Cement Co.

Clamps (Hose)
Dixon Valve & Coupling Co.

Compressors
Allis-Chalmers Co.
Ingersoll-Rand Co.
Jaeger Machine Co.

Concrete Curing Material
A. C. Horn Co.
Sisalkraft Co.

Concrete Mixers, Pavers, Tampers
Chain Belt Co.
Construction Machinery Co.
Foote Co.
Jaeger Machine Co.
Knickerbocker Co.
Koehring Co.
Kwik-Mix Co.
T. L. Smith Co.
Worthington Pump & Machinery Corp.—Ransome Div.

Concrete Vibrators
Electric Tamper & Equipment Co.
Ingersoll-Rand Co.
White Mfg. Co.

Conveying Machinery
Barber-Greene Co.
Chain Belt Co.
Iowa Mfg. Co.
Joy Mfg. Co.
Link-Belt Co.
Universal Engineering Corp.

Cranes
Austin-Western Co.
Bucyrus-Erie Co.
Cleveland Trencher Co.
Clyde Iron Works
Harnischfeger Corp.
Koehring Co.
R. G. LeTourneau, Inc.
Link-Belt Speeder Corp.
Michigan Power Shovel Co.
Northwest Engineering Co.

has something to do with "Drums"

A lot of different things get called a "drum," but not on a present-day concrete mixer or paver.

Because contractors, architects, and engineers *must know instantly and without guessing* what a drum will hold and properly mix, they demand and get exact uniform capacities, certified by AGC Rating Plates.

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Mixer Manufacturers Bureau

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THE FOOTE CO., INC.
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THE JAEGER MACHINE CO.
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THE KNICKERBOCKER CO.
Jackson, Mich.

KOEHRING COMPANY
Milwaukee, Wis.

KWIK-MIX COMPANY
Port Washington, Wis.

THE T. L. SMITH COMPANY
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WORTHINGTON PUMP & MACHINERY CORP.
Ransome Division, Dunellen, N. J.

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2. "Balanced" Piston type control valve non binding, free action, creep proof.
3. Double "T" members supports lift mechanism—protects truck frame.
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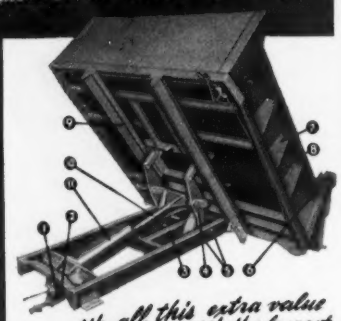

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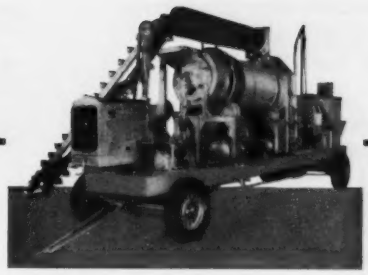

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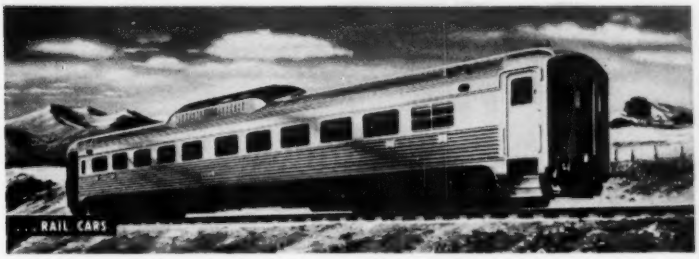
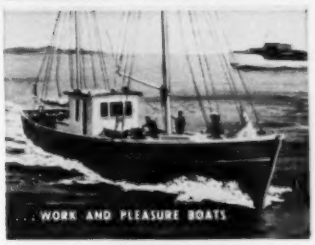


This is the Diesel

that speeds the big jobs



HERE IT IS—the newest member of the General Motors Diesel family—the brawny 6-110 engine that develops 275 horsepower.

It is 50% more powerful than the famous 6-cylinder GM "71" engine that powers so many trucks, buses, boats, construction equipment and other mobile, portable and stationary units.

This rugged new Diesel doesn't care what's tied to its tail. It has power to spare to keep big jobs humming, yet is so compact it doesn't hog space.

For example, each new Budd RDC rail car is driven by a pair of 6-110 Diesels with GM torque converter transmissions. The compactness of these power plants permits mounting them under the floor so that no revenue space is lost. These rail cars accelerate from standstill to 44 miles per hour in just one minute and have a top speed of 83 mph with a full load.

Like all other GM Diesel engines the 6-110 is two-cycle—delivers power on every piston downstroke. This advanced design cuts down Diesel size without sacrificing ruggedness; it insures fuel economy, lower maintenance costs, exceptional dependability and long life.

The GM 6-110 engine provides Diesel power at its best for heavy-duty jobs—not only for rail cars but in the largest mountain-type trucks, huge rock crushers, deep-sea fishing and pleasure boats, big pumps and compressors, mining and oil field equipment. *It is an exceptionally compact Diesel for its horsepower—an engine that gives remarkably fine performance in minimum space.*

DETROIT DIESEL ENGINE DIVISION

SINGLE ENGINES . . . Up TO 275 H. P. **DETROIT 28, MICHIGAN** MULTIPLE UNITS . . . Up TO 800 H. P.

GENERAL MOTORS

Hear HENRY J. TAYLOR on the air every Monday evening over the ABC Network, coast to coast.

GM
GENERAL MOTORS
DIESEL POWER

Only GM Diesels provide all these advantages

Compact size—less weight per horsepower . Two-cycle smoothness, power on every downstroke . Quick starting, on its own fuel . Unit injectors—no high-pressure fuel lines . Rapid acceleration . Cleaner burning . Better high-altitude performance . Easy accessibility.

"Your Key to Power Economy"

"The Proof is in the Putting"

CLYDE

STEEL ERECTORS HOISTS

PUT MATERIALS WHERE NEEDED FASTER...EASIER...MORE ECONOMICALLY ON THE DELAWARE MEMORIAL BRIDGE

CLYDE DESIGN EXCEEDS ON THE JOB REQUIREMENTS

4 Clyde Hoists are speeding construction for the American Bridge Company by hoisting steel sections weighing up to 55 tons on their Delaware Memorial Bridge job.

4 Clyde Steel Erectors Hoists are handling materials and supplies on this gigantic bridge job for the American Bridge Company, United States Steel subsidiary. Hoists that were especially engineered for the job they are to perform . . . engineered to fill the exacting needs of their owners and operators.

On jobs of this nature where minutes are measured in dollars, hoisting equipment must give dependable, trouble-free performance at all times. Clyde steel erectors hoists incorporate important features that will result in safer, faster and more efficient material handling.

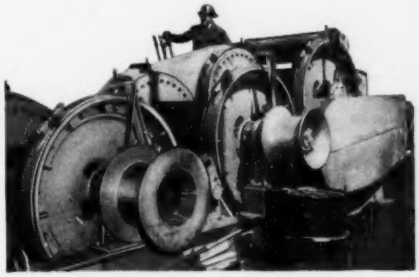
Precision made clutches and double, equalized brakes permit accurate and positive load control. Torque converters allow working at maximum hoist output with less operator fatigue.

Sturdy anti-friction bearings mean greater efficiency and less maintenance. In brief, every part is designed for its particular duty to produce a well balanced machine with safety and dependability its keynote.

Whatever your hoist requirements, it will pay you to get complete information on Clyde . . . talk with owners and operators. Clyde's records of performance are our best salesmen . . . your most valid measure of their worth.

WRITE FOR BULLETIN

Bulletin L-4 contains full information on Clyde gasoline and Diesel hoists. Our staff of engineers will gladly make recommendations and provide complete specifications on the machine best suited for your particular needs.



Closeup of a Clyde Hoist doing its job with ease on one of the largest suspension spans in the world. Easier, safer, faster operation characterizes DEPENDABLE Clyde Hoists.

HOISTS . . . DERRICKS . . . CAR PULLERS . . . BUILDERS TOWERS . . . WHIRLEYS . . . ROLLERS . . . HANDI-CRANES

CLYDE IRON WORKS, INC.

DULUTH 1, MINN

Subsidiary of Barium Steel Corp.